

**Interrogating the possibilities and problems of
YouTube sex edutainment content: an Actor-
Network Theory approach**

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Abstract

British Relationships and Sex Education (RSE) has gained public attention in recent years due to several reports highlighting gaps in provision and a change of statutory guidance for RSE in 2019. Historically RSE has linked sex with risk and shame, stifling communication and leaving gaps in RSE provision around pleasure, LGBTQ+ education, and other intersectional needs. This can lead to unfulfilled information needs that many young people try to fulfil by seeking information online.

However, the rise of social media influencers has created micro-celebrities with influence on their followers. Some influencers specialise in talking openly about sex education topics. This research focuses on YouTube content created by these influencers, referred to as YouTube sex edutainment. Using an Actor-Network Theory approach, the research interrogates the possibilities and problems of this form of disseminating sex, relationships and sexual health information to understand if and how it can be utilised on a broader level to fill the gaps in provision for 13–24-year-olds.

Using a three-phase mixed methods approach, this research focuses on each of the key actors in the YouTube sex edutainment assemblage: YouTube, Influencers and Young People. Phase one interrogates YouTube using Walkthrough analysis to observe opportunities and limitations of utilising YouTube for sexual health learning. Phase two develops a health influencer framework, before identifying the role of influencers within the assemblage through email interviews with YouTube sex edutainment influencers and analysis of public audience comments on their videos. The third phase uses online surveys with 13-24-year-olds to identify how British young people seek and share sex, relationships and sexual health information, and the role of digital media within this. The perspectives of each of these actors are then amalgamated to identify 3 key possibilities for YouTube sex edutainment: existing use, peer education potential, and accessibility; and 3 key problems: funding, misinformation, and platform governance; and how these could be addressed in future interventions.

Chapter 1 – Introduction

1.0 Introduction

British Relationships and Sex Education (RSE) has gained attention in recent years with reports raising concerns that RSE provisions were not meeting the needs of young people (OFSTED 2013, 2021; Terrance Higgins Trust, 2016), leading young people to turn to internet information sources, including social media and pornography to meet their information needs (Litsou, Byron, McKee & Ingham, 2020; Goldstein, 2020; Davis, Carrotte, Hellard, Temple-Smith & Lim, 2017; Cheney, Kamusiime & Mekonnen Yimer, 2017; Wright, Sun & Steffen, 2018; OFSTED, 2021). This research interrogates the possibilities and problems of sex edutainment content on the video sharing platform YouTube for independent sexual health learning. Using Actor-Network Theory to examine the assemblage of YouTube, Influencers and British young people¹ aged 13-24-years-old, this thesis intends to understand if and how this method of disseminating sexual health information can be utilised to address the sexual health information seeking practices of British young people.

This chapter will introduce sexual health as a public health concern, the many forms of sex education that take place and outline the timeliness of the topic in the United Kingdom (UK). The chapter will then contextualise the work that led to this project and introduce YouTube and YouTube sex edutainment. Following this, my subjectivity, interdisciplinary background, and its influence on the research will be discussed. The chapter will close with an overview of the study design and thesis structure.

1.1.1 Sexual health as a public health concern

Sexual Health has been an evolving concept, shaped by political, social, and historical events (Edwards & Coleman, 2004). At present, the World Health Organisation (WHO) defines Sexual Health as being:

¹ The World Health Organisation (WHO) (2014) notes that terms describing adolescence are often used interchangeably depending on country and context. However, WHO defines adolescents as those people between 10 and 19 years of age and notes other overlapping terms are youth (defined by the United Nations as 15–24 years) and young people (10–24 years), a term used by WHO and others to combine adolescents and youth. For the purposes of this research the term Young People will be used to describe the target audience of this research – ages 13 – 24-years-old, as there is no single pre-existing term for this group.

‘fundamental to the overall health and well-being of individuals, couples and families, and to the social and economic development of communities and countries. Sexual health, when viewed affirmatively, requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence.’
(World Health Organisation, 2021)

Therefore, sexual health is an essential part of both the physical health and overall well-being of individuals and their intimate networks. Inadequate sexual health can lead to health issues both short and long term, for instance the WHO identify the following sexual health-related issues:

‘Sexual health-related issues are wide-ranging, and encompass sexual orientation and gender identity, sexual expression, relationships, and pleasure. They also include negative consequences or conditions such as:

- *infections with human immunodeficiency virus (HIV), sexually transmitted infections (STIs) and reproductive tract infections (RTIs) and their adverse outcomes (such as cancer and infertility);*
- *unintended pregnancy and abortion;*
- *sexual dysfunction;*
- *sexual violence; and*
- *harmful practices (such as female genital mutilation, FGM).’*

(2021)

Thus, sexual health is a significant area of public health concern. In 2016-2017 Sexually Transmitted Infections cost the UK National Health Service (NHS) £374m (Public Health England, 2021). In 2019 there were 468,342 new diagnoses of STIs made in England, an increase of 5% on the previous year. (Public Health England, 2019²). Public Health England (2019) have identified that rates of gonorrhoea have continued to rise rapidly (with an increase of 26% on the previous year, and 71% since 2015) and that antimicrobial resistance for gonorrhoea is a significant concern, with 2019 being the highest infection rate since records began in 1918. Chlamydia diagnoses increased by 5% from 2018 to 2019, and together gonorrhoea and chlamydia accounted for 64% of new diagnoses. The same Public Health England report states that the impact of STI is greatest in *‘young heterosexuals 15 to 24 years;*

² Due to the impact of the COVID-19 pandemic national lockdowns in 2020 and 2021, the most recent year selected to share statistics related to sexual health was 2019.

black ethnic minorities; and gay, bisexual and other men who have sex with men (MSM) (Public Health England, 2019).

However, a 2019 parliamentary review by the Health and Social Care Committee found that funding cuts to sexual health services in the UK since 2013 have led to a reduction in prevention measures, with a *'35% real terms reduction in local authority spending on sexual health advice, prevention and promotion between 2013/14 and 2017/18, compared to a 14% decrease in local authority spending on sexual health overall'* (Health and Social Care Committee, 2019; p.33). The report suggests that this reduction in prevention is 'short-sighted', and likely to cause an increase in treatment costs over the long term (Health and Social Care Committee, 2019). Importantly, this report identifies that good sexual health starts with good sex education and emphasises the importance of advancing the way the UK delivers prevention through education. It is known that investment in prevention is a significant way to reduce illness, while also reducing the long-term economic healthcare costs of a country (The European Observatory on Health Systems and Policies, 2015), this research will look at alternative forms of prevention and communication.

1.2 The many forms of sex education

One form of prevention utilised in the UK is through Relationships and Sex Education (RSE) which commonly takes place in school settings, however there are many ways that sexual health education can be disseminated and engaged with. This section will provide some initial context around traditional RSE to lay the foundation in understanding why this research has chosen to look beyond RSE to independent sexual health learning, before discussing the expansive ways sexual health information can be disseminated beyond RSE.

UK RSE provides comprehensive sex education³ that teaches about contraceptives rather than an abstinence-only⁴ approach. However, UK RSE has been influenced by

³ Comprehensive RSE is sex education that provides a comprehensive, scientifically accurate information about reproductive health, contraception, childbirth and sexually transmitted infections.

⁴ Abstinence-only education promotes abstaining from sex outside of marriage, it usually does not provide comprehensive information about sex and contraceptives.

cultural attitudes to sex ([see section 2.1.1](#)) and some significant policy regulations⁵, leading RSE to stall in meeting young people's sexual health and relationship information needs. In 2013 the UK school regulator, OFSTED, issued a report titled: '*Not good enough yet: PSHE in schools*' which found RSE required improvement in over a third of primary schools and half of secondary schools studied (OFSTED, 2013), stating:

'In primary schools this was because too much emphasis was placed on friendships and relationships, leaving pupils ill-prepared for physical and emotional changes during puberty, which many begin to experience before they reach secondary school. In secondary schools it was because too much emphasis was placed on 'the mechanics' of reproduction and too little on relationships, sexuality, the influence of pornography on students' understanding of healthy sexual relationships, dealing with emotions and staying safe.' (p.6-7)

Meanwhile a 2016 report by the Terrance Higgins Trust found that 50% of respondents rated the RSE they received in school as 'poor' or 'terrible', with only 2% selecting 'excellent' and 10% identifying that their RSE experience was 'good' (Terrance Higgins Trust, 2016). As a result, the UK Government made RSE compulsory across the UK in all secondary schools, alongside updating the RSE statutory guidelines for schools for the first time in almost 20 years in 2019 (Department for Education, 2019) which was brought into practice in the 2020/21 academic year.

Yet, even with these proposed changes, UK RSE is largely inconsistent as neither the outgoing nor incoming statutory guidance for schools (Department for Education, 2000, 2019) provide specific practical advice on the implementation of RSE. The 2019 guidance does not recommend how many lessons should be dedicated to RSE, when these should be started or how they should be taught but encourages the drawing of links between relevant subjects⁶ (2019, p.39) and identifies what students should know by the end of primary school and the end of secondary school. Therefore, the guidelines are open to interpretation by schools and their governing teams. Some schools choose to work with recognised sex education organisations such as Brook (Brook, 2020) who address the common gaps in provision, however schools may work

⁵ namely 'Section 28'. Section 28 of the Local Government Act 1988 was a law instated in 1988 which prevented local authority schools from promoting homosexuality in England, Scotland, and Wales, that was abolished in 2003 but has had impacts reaching beyond this period (Vanderbeck & Johnson, 2015; Lee, 2019).

⁶ For example, in computing when students study e-safety this can be linked with giving students the tools to stay safe from online predators.

from textbooks, use digital interventions, peer education programmes, theatre-based interventions or any other method of delivery or resource they choose. Furthermore, due to the localised funding structures for sexual health through local authorities, prevention initiatives, programmes and interventions are not consistently available in all parts of the country (Health and Social Care Committee, 2019). Beyond this, there has not been a study across the whole of the UK to identify the full range of how schools interpret and deliver RSE guidelines, and the extent of the differences impacted by local authority funding, therefore it is difficult to gain a clear picture of the present condition of RSE. Although the 2019 guidelines suggest the importance of flexibility for teaching RSE, the lack of uniformity makes understanding what RSE looks like in practice today unclear. However, we do know that recent reports suggest that RSE in the UK is 'not good enough' at addressing the information needs of young people (OFSTED, 2013; Terrence Higgins Trust, 2016; OFSTED, 2021).

Further recognition of this was noted in 2021 when RSE returned to public attention after OFSTED (2021) conducted a rapid report into peer-on-peer sexual assault in schools and discovered concerning results. 88% of girls and nearly 49% of boys aged 13-18-years-old identified that being sent explicit videos between people their age happened 'a lot' or 'sometimes', meanwhile 80% of girls and 40% of boys expressed that being put under pressure to provide sexual images of themselves was common for people their age. The report also raised concerns of the taking and circulation of photographic or video content between young people without consent. In addition, 64% of girls and 24% of boys reported that unwanted touching happened 'a lot' or 'sometimes' between people their age, 68% of girls and 27% of boys expressed that feeling pressured to do sexual things they did not want happened 'a lot' or 'sometimes', and sexual assault of any kind was noted to happen 'a lot' or 'sometimes' by 70% of girls and 38% of boys.

Because of this, young people expressed that they were not happy with the quality of RSE they received and turned to social media and their peers instead:

"Children and young people were rarely positive about the RSHE they had received. They felt that it was too little, too late and that the curriculum was not equipping them with the information and advice they needed to navigate the reality of their lives. Because of these gaps, they told us they turned to social media or their peers to educate each other,

which understandably made some feel resentful. As one girl put it, 'It shouldn't be our responsibility to educate boys.' (OFSTED, 2021)

This report raises significant concerns about RSE not serving the needs of young people, leaving teenagers unprepared for navigating the terrain of sex and relationships.

In light of this, there is a renewed need to understand the role of resources and sexual health communication strategies that resonate with young people in the UK. This is especially valuable given the findings of the 2020 Digital Health Generation report where 75% of survey respondents (11 – 18-year-olds in England) said that they owned their first mobile/tablet between the ages of 8-11 years and 70% reported using digital technologies for health purposes, while 55% used smartphones as their main technology to learn about health (Rich et al., 2020). This uptake in technology has profound consequences for sex education; now that many young people have access to sexual information via websites, pornography, and online forums (Pound, Langford and Campbell, 2016; Hobaica & Kwon, 2017) sexual health information needs to evolve with media to stay relevant. Studies have found that when young people's sexual health information needs are not met, they often turn to online resources, including pornography⁷ (Litsou, Byron, McKee & Ingham, 2020; Goldstein, 2020; Davis, Carrotte, Hellard, Temple-Smith & Lim, 2017; Cheney, Kamusiime & Mekonnen Yimer, 2017; Wright, Sun & Steffen, 2018).

For this reason, this thesis will look beyond traditional RSE classroom interventions and focus on the possibilities and problems of YouTube sex edutainment for young people's independent sexual health learning. Although RSE is the predominant method of teaching about relationships and sex in the UK, Nelson and Martin (2004) suggest sex education is not limited to the formal education in classrooms but can include a variety of different delivery methods and media for audiences of any age⁸. Sex, relationships and sexual health information can be disseminated in many forms through multiple communication channels, for example teenage magazines products

⁷ I wish to make clear that no moral judgements are held against pornography within this study, nor is it assumed to be an illegitimate source of knowledge (Litsou, et al., 2021). However, pornography with and as pedagogy is a complicated topic (Albury, 2014) and young people, especially those under the age of 18, may not have the skills or experience to interrogate or interpret the images, messages, and representations they encounter in porn alone.

⁸ Their examples include adult marriage manuals, parental explanations about birth and even *'cautionary films about venereal disease aimed at soldiers in the First or Second World Wars'* (P.1).

(McKee, 2017), mobile applications (apps) (Herbst, 2017; McKee et al., 2018) and social media (Johnston, 2017; Manduley, Martens, Plante & Sultana, 2018; Heikningen & Clief, 2017; Borrás Perrez, 2021). Sex education interventions are also not limited to school-age students under the age of 18, but can also include adult populations in an international development context (Herbst, 2017; Usdin, 2000; Kirby, Laris & Rolleri, 2007; Heikningen & Clief, 2017), university students (Santelli et al., 2018) and other groups who may be considered a sexual health high risk. Therefore, sexual health information sharing and education can be conducted using a variety of communication channels anywhere that sexual health needs require meeting. The research in this thesis extends beyond pedagogical classroom RSE and explores independent self-directed learning on YouTube.

The next chapter will provide additional context on the historical and cultural underpinning of sex education, how this has led to gaps in meeting the sexual health information needs of young people and theorises YouTube sex edutainment content as a way for young people to meet their own sexual health information needs beyond RSE.

1.3 Work that led to this project

This research was inspired by the findings of a small empirical study conducted during my masters degree at Goldsmiths College in 2017 (see [appendix A](#) for an executive summary of the unpublished research and findings). The study sought to understand parent and teacher perspectives on RSE and the role digital resources played in supporting adults in how they approach and disseminate sex and relationships information to 4–18-year-olds. The work considered how British RSE has traditionally responded to moral sex panics and narratives of innocence creating a cloak of shame around sexuality, particularly female sexuality, and sought to understand how emotionally-aware RSE might be delivered through technologies to enable grassroots sharing and build on young people's existing digital habits. The research gathered the opinions of parents and teachers of children aged 4 – 18 years on RSE, the resources they interacted with and their children's use of social and digital media via online surveys and interviews.

The key findings were that both groups indicated that digital resources would be the most useful yet they were slow to take these up; with the highest proportion of each group (70.8% of parents, 87.5% of teachers) selecting digital resources as the most useful to them but only 13.8% of parents using digital resources. Further to this 58.4% of teachers reported that their schools did not provide them with a wide variety of resources to teach RSE and discuss sexual health with students. The research also identified a lack of consistency and communication between home and school RSE

Parents identified that their children were extremely digitally active, with 89.2% having access to a computer at home, meanwhile the most popular digital platform parents mentioned their children using was YouTube (64.6% reported usage by their children). YouTube was three times more popular than the other social networking sites such as Instagram, Facebook, or Snapchat according to respondents. Some of the low uptake with other social media sites may be explained because many respondents to the survey had younger children. However, the popularity of YouTube may also be due to the wide array of user-generated content, social media tropes (such as commenting, liking, following/subscribing and the community aspect of YouTube) alongside its platform for audio-visual media which make it appealing to a variety of ages, as well as the opportunity to share and embed YouTube videos across most other social media platforms.

Additional factors that led to the selection of YouTube for the research included the 2020 Digital Health Generation report with English young people aged 11 – 18, which found YouTube to be the most popular source of health information, with 44% of survey respondents reporting use, and when asked *'What kind of online content do you think has helped you understand health better?'* respondents selected YouTube over official information sources such as the NHS website, Web MD, etc. (Rich et al., 2020; 22-23). The popularity of YouTube was also reported in a 2018 telephone interview survey of US teens (n=735 representative sample aged 13-17) where 85% of teenagers surveyed said they used YouTube, making it the most popular response above Instagram (72%), Snapchat (69%), and Facebook (51%) (Pew Research Centre, 2018). The popularity of YouTube supports the findings of McKee, et al., (2018) who found that young people enjoyed video sex education content but preferred it to be easily sharable on social media rather than limited to a locked down app. Therefore,

due to the wealth of academic studies of YouTube over its long-established history as a social media platform (Burgess & Green, 2009; Johnston, 2017; Morris & Anderson, 2015; Cunningham & Craig, 2017; Jerslev, 2016; Dunclum, 2011) and the evidence of its extensive use by young people, existing YouTube sex edutainment content and the role of influencers was selected as the focus of this research.

Although my previous study focused on 4 – 18-year-olds, the focus of this research was selected to be 13-24-year-olds for the following reasons:

- YouTube does not allow children under the age of 13 to open a YouTube account, meaning that 13 years was a logical lower age for participants.
- The 2013 OFSTED report found RSE required improvement in half of secondary schools, compared to only a third of primary schools, this implies that there are greater gaps of knowledge in secondary age pupils.
- RSE was made compulsory in all secondary schools from September 2020 but is still not compulsory in all primary schools.
- The National Institute for Health and Care Excellence (NICE) have identified 16-24-year-olds as a key focus in the prevention of STIs (NICE, 2019), meanwhile Public Health England are undertaking work to raise awareness of STIs in the 16 to 24-year-old age group (Royal College of Nursing, 2021). This is because young people still remain a high-risk group for STI transmission in the UK, with 20 – 24-year-olds having the highest rate of STI transmission for almost all STIs (Public Health England, 2019).

1.4 What is YouTube

YouTube is an online video-sharing social media platform, consisting of a website and application (or 'app') for mobile devices, tablets, and televisions. YouTube allows users to upload videos, as well as view, rate and create playlists of videos made by others. The platform utilises social media features including commenting on videos, subscribing to other users' content and sharing videos outside of YouTube. Rather than a profile page users have their own 'channel' where they can share their videos and other users can follow them by subscribing, users do not need to subscribe to see the videos a person posts but subscribing allows them to personalise the content they see recommended by YouTube's recommendation algorithms. Launched in 2005 and

now with 2 billion logged-in global monthly users⁹ (YouTube, 2020), having been acquired as part of the Google business, the platform has become a worldwide social media platform with extraordinary reach.

YouTube allows users to monetise their videos through their YouTube partner programme, once they have 1000 subscribers and 4000 watch hours¹⁰ within 12 months, by displaying advertising content before and during their videos and there has been a push to professionalise novice video creators by the platform (Cunningham & Craig, 2017). This professionalisation of amateur social media creators has developed into celebrity-like status for some content-creating users, transforming them into 'influencers'. Abidin (2016) describes influencers as '*social media micro-celebrities*'. Influencers have been created in almost every content niche on YouTube including make up tutorials, game play walkthroughs (Cunningham & Craig, 2017) and video blogging or 'vlogging' (Jerslev, 2016; Lovelock, 2017). One such niche is sex edutainment videos on YouTube (Johnston, 2017).

1.4.1 YouTube Sex edutainment

YouTube sex edutainment is a small niche, however the phenomenon offers an opportunity to observe the way connections are made between influencers and audience through the audio-visual social media platform, and the potential impacts this may have on sexual health learning. In this thesis I will be referring to the content described below as 'YouTube sex edutainment'; as 'sex edutainment' is the term Johnston (2017) uses to describe this content that mixes sexual education with entertainment value, and Johnston's paper is the only published reference to this niche YouTube content community.

YouTube sex edutainment videos are usually delivered in a talk-to-camera style by what Johnston (2017) refers to as '*friendly and engaging*' YouTube influencers who act as a '*cool older friend*' (p.77). These influencers create videos discussing various aspects of sex and relationships, answering audience questions using a casual and approachable tone. Some cover general sex education

⁹ This makes YouTube the second most visited website in the world after Google. This places YouTube above Facebook and every other social media platform for global reach (Statista, 2021)

¹⁰ Watch hours are the number of hours other people have spent watching their content

related topics, such as discharge (Witton, 2020a), HIV/AIDS (Green, 2016) or sexual arousal (Witton, 2020b). Others specialise on topics such as LGBT issues (McKenna, 2019).



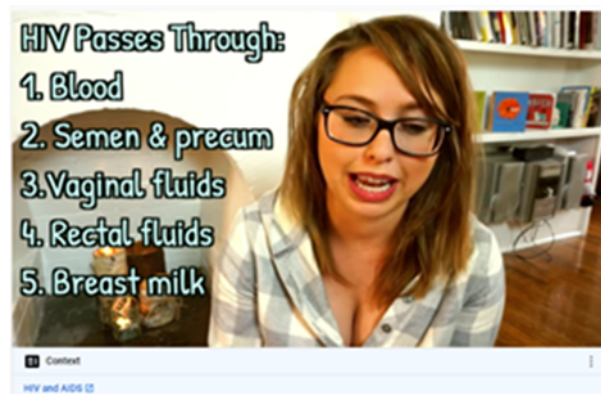
Left, Hannah Witton (2020a)



Right, Hannah Witton (2020b)



Left, Miles McKenna (2019)



Right, Laci Green (2016)

Figure 1 – Sex edutainment influencer screenshots

Some Sex edutainment influencers have professional backgrounds in sexual health (e.g., Dr Lindsey Doe who is a clinical sexologist, and Calum McSwiggan who worked for the HIV charity Terrence Higgins Trust) whilst others begin as amateurs with a passion for sexual health (e.g., Hannah Witton and Laci Green) and may later choose to train professionally, or not. YouTube sex edutainment content frequently includes key information written on screen (figure 1) to keep the presentation interesting, engaging and suitable for different learning styles.

Beyond this, common YouTube sex edutainment features include audience members being able to comment on the video, 'like' or 'dislike' to show their opinion and use the

sharing features to send content to friends or share on other social media platforms. These features may make YouTube sex edutainment content engaging, easier to understand and share, however the use of social media and influencers should not be viewed as a 'magic pill' and may also muddy and complicate sexual health communication in its own way, therefore Chapter 3 provides a detailed discussion of the literature detailing both the affordances and challenges around this type of content. From there, this thesis delves deeper into considering the possibilities and problems with this YouTube sex edutainment content, situating it within a growing field of studies into the use of social media for health communication (Chen & Wang, 2021).

1.5 Situating the researcher within the research

As I will explain in detail in chapter 4 ([section 4.1.1](#)), I have an interpretivist stance on research, that no matter how much a researcher attempts to be unbiased, they bring themselves to the research and can often be found within it. This is not necessarily a fault and might instead be considered the researchers unique superpower as they bring their own unique perspective to research development, design and analysis (Finlay & Gough, 2008). Research is, after all, often developed from the passions and interests of researchers, which motivates them to dedicate their time to expanding knowledge on a specific topic. Therefore, it is crucial to acknowledge the subjectivities that influence this research and situate myself as a researcher within it.

Having a previous professional background and undergraduate degree in education, I have always had strong feelings on the importance of education in the shaping and development of young people, which lead me to an interest in developing areas where education may not be meeting the needs of young people. Therefore, sex education became a subject of interest to me as a sex-positive feminist.

My position is undoubtedly influenced by my own experience of RSE in the UK. I was taught RSE under the same outgoing RSE guidelines (Department for Education, 2000) which have only now been replaced and experienced it to be what Lenskyj (1990) would call a '*plumbing and prevention*' education that emphasised only the biological anatomy of reproduction with risk factors of pregnancy and sexually transmitted infections emphasised. My school gave only one detailed lesson on RSE

during a biology class in year 9 (age 13/14) which I missed due to illness and never received any further information. My experience mirrored the observations of Allen (2006) of a curriculum missing dialogue around pleasure, when in a biology lesson aged 12 I answered the question 'why do animals have sex' with 'because it feels good' and was told my answer was incorrect because the correct answer was 'to continue the species'. My early experiences of RSE also involved a lack of LGBTQ+¹¹ sex education which left me underserved as an LGBTQ+ person myself. These experiences made me passionate about comprehensive, robust, and inclusive RSE, and the need to determine how to best support young people's sexual health learning.

Additionally, outside of my research I operate a social media account on Instagram with 15,000 followers which might be considered an influencer account. Although this account does not relate to sex education or health, it does imbue me with unique perspective and interest in influencer cultures. This does not mean I feel that influencers are wonderful or without fault as it has given me insight into aspects of influencer cultures that are problematic and require interrogation such as the role of advertising and limited regulation. However, this does give me a subjective position that sees strong potential value in influencer-audience interactions, which should be acknowledged.

Another reason to situate myself within this research is to understand the interdisciplinary nature of this work, and how this impacts the thesis. This research sits between the intersections of cultural studies, media studies, education, and public health. Having an undergraduate degree in an educational discipline, and an interdisciplinary master's degree in 'Gender, Media and Culture' that sat between sociology and media studies departments, my research background and interests lean towards viewing sex education through the lens of these disciplines, rather than through a solely public health vantage point. This impacts the writing of this thesis, as writing conventions between these disciplines vary significantly. Therefore, this thesis predominantly takes a cultural studies and media studies approach to writing convention, which tends to be less scientific in tone than public health writing, whilst also utilising some conventions of public health research where the more scientific

¹¹ LGBTQ+ is an umbrella term for Lesbian, Gay, Bisexual, Transgender, Queer + other associated identities

nature provided support to the research. A further discussion on the tensions of interdisciplinary research can be found in [section 4.1.5](#).

1.6 Introducing Actor-Network Theory

In order to understand the relationship between young people and YouTube sex edutainment this research uses Actor-Network Theory (ANT) as a framework. ANT comes from the field of Science and Technology Studies and was developed by Latour (1987, 2005), Callon (1989), Law (1992) and Akrich (1991, 1997) amongst others. This section aims to provide a short introduction to the concept of ANT to give readers a clear understanding from the outset of the direction and process of this thesis, however an in-depth analysis of Actor-Network Theory can be found in [chapter 4](#).

The theory was born out of a frustration over social scientists' tendency to refer to 'the social' as a homogenous entity, therefore ANT rallied against this by encouraging the tracing of the connections that make up a social experience (Latour, 2005). For example, rather than assuming social media to be a type of media that is 'social' in comparison to other media forms, ANT would consider the individual elements that make up a specific social media experience and how the assemblage of these elements, or 'actors', create a connection between them.

In ANT actors can be both human and non-human. Let us take the example of a child calling their grandmother on the telephone, the assemblage of actors in that conversation could be considered to be the child, the mobile phone the child rings from, the grandmother and the landline telephone the grandmother receives the call on. The theory does not privilege human actors over the non-human actors, they are all equal and mutually shaping within the social experience. For example, if the child's mobile phone runs out of battery the social interaction can no longer take place, the non-human actor of the mobile phone has equal impact on the two human actors regardless of its inanimacy. However, as we consider the assemblage further, additional actors may be revealed. If halfway through the call the child's mobile phone loses signal, making the call incomprehensible to the grandmother, the cell tower might also be included as part of the assemblage that makes up the social interaction. ANT traces the associations between the actors in any given assemblage to observe a phenomenon and ultimately understand it. As Latour (2005) summarises; '*social*' is

not some glue that could fix everything including what other glues cannot fix; it is what is glued together by many other types of connectors' (p.5).

As this study explores the opportunity for the use of YouTube in independent sexual health learning, it is important to remember that repackaging sex education content into a new 'exciting' social media channel does not create an instant fix to the challenges experienced in disseminating sexual education. This research therefore uses ANT to inspect how the assemblages at the heart of YouTube sex edutainment create opportunities and challenges in the seeking of sexual health information for 13-24-year-olds. To do so, this research centres around three key actors who participate in the assemblage of YouTube sex edutainment; YouTube, Sex edutainment influencers and Young People.

These three actors mirror closely those identified by Burgess and Green (2009a), who identify that YouTube is a 'co-creative culture' that is created and recreated in an ongoing process of interconnected instances of participation between YouTube, content producer and audience:

'YouTube's culture— the media forms and practices that combine to constitute the "YouTube-ness" of YouTube — is determined through the interaction of YouTube Inc., which provides the framework, infrastructure and architecture of the service; the various users who upload content to the website; and the diverse audiences who engage with that content and each other.' (p. 103)

This makes Actor-Network Theory well suited to the tracing of connections between these three actors, at the site where they meet around sex edutainment content. As Burgess and Green have identified, these key actors, both human (audience and content creator) and non-human (YouTube) are co-creative and mutually shaping. In Figure 2 below we can see how this mutual shaping takes place around sex edutainment content on YouTube.

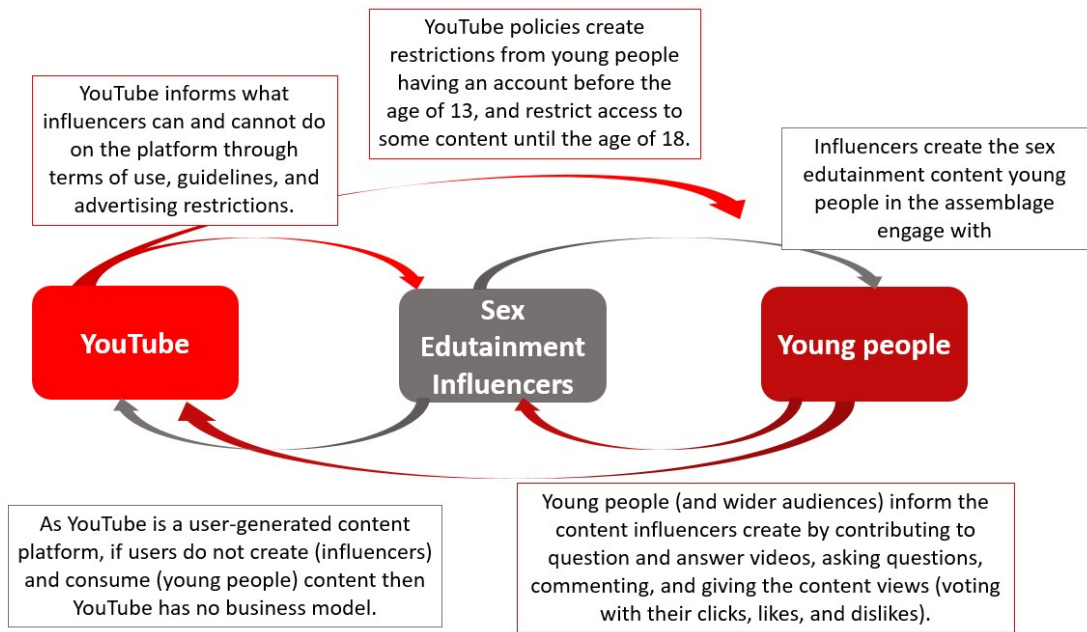


Figure 2 – The mutual shaping of YouTube sex edutainment key actors suggested by the researcher

This thesis will explore these elements of shaping in more detail in chapters 2 and 3. These chapters will also extend focus beyond the three key actors to the other elements, both human and non-human, influencing the key actors within the network, and throughout the thesis I will return to and extend this diagram as the study develops understanding of this assemblage.

1.7 Overview of study design and thesis structure

This thesis is centred around achieving one aim through the execution of 6 research objectives:

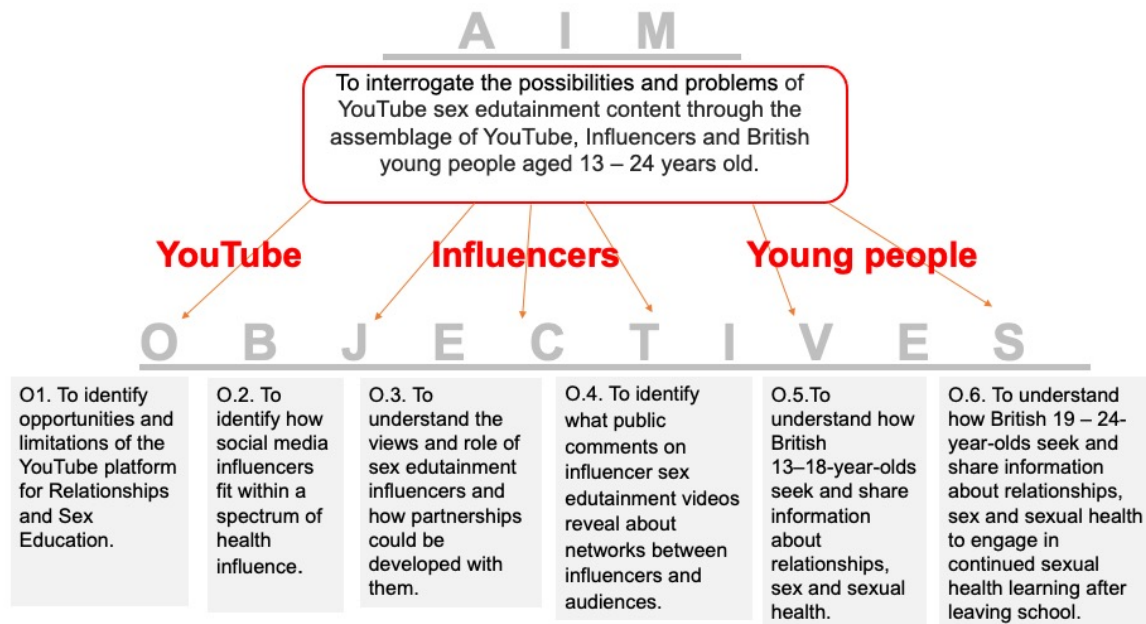


Figure 3 - Research aim and objectives

To achieve the aim and objectives a three-phase study was designed ([see 4.2 for full details](#)):

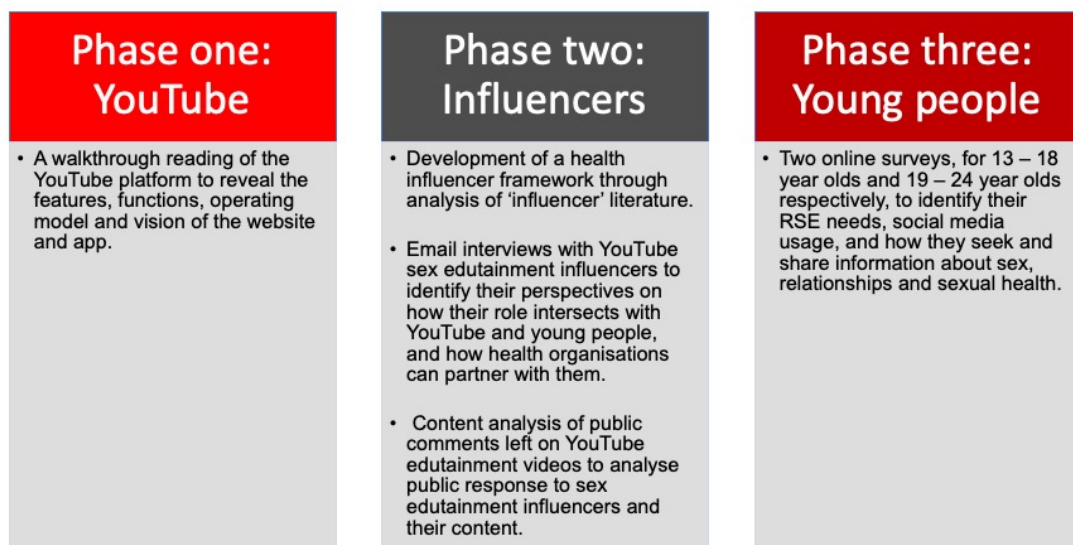


Figure 4 - An overview of the study design

Based on the findings of this study, a series of recommendations have been created for public health organisations, and for each of the three key actors (these can be found in [Chapter 8](#)). The thesis will follow the structure laid out below in figure 5:



Figure 5 - Thesis design and contribution of chapters

1.8 Conclusion

This chapter introduced sexual health as a public health concern, and noted that although RSE is the predominant method of education and information provision to address sexual health information needs in the United Kingdom, there have been significant gaps identified in British RSE. Therefore, this introduction noted that sex education is not limited to these school-based interventions and that this research will look beyond RSE to alternative independent sexual health learning on YouTube. The work that led to this study was also identified in this chapter, YouTube was introduced, and YouTube sex edutainment content identified as a focus. The chapter then recognised the subjectivity of the researcher in the research development and the situation of the research between academic disciplines, before identifying the aims and objectives of this study and providing a basic outline of the research design and thesis structure. In short, this chapter has introduced a basic foundation upon which the building blocks of this thesis will be constructed, and the key points to take forward are that maintaining sexual health and wellbeing is important, however, despite the UK taking steps to improve their RSE provisions, current school based RSE is not good enough. Therefore, this thesis will use Actor-Network Theory to interrogate YouTube sex edutainment to understand the possibilities and problems of this method of independent sexual health learning and if it can contribute to filling young people's sexual health information needs.

The next two chapters of this thesis will review the relevant literature relating to the core topics that affect this study. To understand why YouTube sex edutainment is needed [Chapter 2](#) sets the context of how the history of, and dominant cultural discourses around, sex education have led to significant gaps in RSE meeting young people's sexual health information needs. The chapter will also explore young people's use of social media for sexual health information seeking and digital intimacies, and will suggest why YouTube sex edutainment may offer ways of meeting these needs as a potential form of digital peer education. [Chapter 3](#) will discuss literature around the other two key ANT actors of this thesis; YouTube and Influencers. In doing so, these chapters begin the tracing of connections around the key actors of YouTube sex edutainment by mapping them through the literature.

Chapter 2 – Sex education, young people and digital intimacies

2.0 Introduction

To understand why YouTube sex edutainment may be necessary we must first understand why existing RSE¹² is not addressing young people's sexual health information needs. This chapter will begin with some context on the history and debates surrounding sex and sex education, both in the United Kingdom and further afield, and how these have impacted current RSE provision. The chapter will then interrogate RSE using the principles outlined by Nelson and Martin;

“For one thing, we have the question of what the term “sex education” may be said to include. What kinds of knowledge are being passed along? Who is imparting this knowledge, and who receiving it? Where does the transmittal of information take place? What teaching aids are in use, and what are understood to be the consequences of students’ learning or refusing to learn?”
(2004; 1)

These questions help us understand the young people who may form part of the YouTube sex edutainment assemblage, by interrogating the RSE landscape they find themselves in, and therefore why they may seek alternative sexual health information beyond what they receive in school. The chapter will then consider young people's sexual health information seeking, their use of social media and digital intimacies. Finally, the chapter will suggest why YouTube sex edutainment may be able to utilise the social aspects of peer education with a digital medium to meet young people's sexual health information needs through independent learning.

The literature explored in this chapter has built upon the literature base collated for my previous MA study on sex education, with extensive additional reading conducted using Google Scholar, PubMed, PsychINFO, CINHALL, Web of Science, Education Resource Information Center, Scopus, and the University of Salford library catalogue. Government websites and google were also used to locate grey literature and reports.

¹² This chapter will talk both about RSE (the UK school-based sex education provision) and sex education more generally.

As this study is an extension of the work started in my MA dissertation (Lawrence, 2018), some literature, points and sentences that formed the background of that work have been used and expanded in this chapter to provide a detailed background context. As this chapter provides a background to this study, no systematised review of literature was conducted, as a number of systematic reviews have already been undertaken on the topics in this chapter (See [Appendix B](#) for a table of all reviews undertaken around the topics in this research post-2000), instead a systematic review of the use of social media influencers in health has been conducted in chapter 3 ([see section 3.7](#)).

2.1 Dominant narratives and histories of Relationships and Sex Education

This section will provide the context on why current RSE provisions are not meeting the sexual health information needs of young people. It will begin with a history of RSE and moral panics, after which discourses of risk and shame will be explored, alongside the role parents have played in these narratives. The section will then move on to interrogate who traditional sex education interventions are for, what young people identify as their sexual health information needs, and how existing UK RSE is not meeting these. In doing so this section of the thesis provides an in depth background for why we need to look beyond traditional school based RSE interventions, as the thesis goes on to do.

2.1.1 The History of Relationships and Sex Education: Sex, innocence and moral panics

RSE does not have a definite point of inception in Britain, rather as Pilcher (2005) demonstrates in reviewing sex education policy and practice in England between 1870 – 2000, there seems to have been a slow building of sexual or reproductive knowledge within formal hygiene or health education teaching in the years preceding the 1940s. Pilcher highlights that although in 1943 the Board of Education published an advisory pamphlet named *Sex Education in Schools and Youth Organisations* encouraging schools to provide instruction around sex, little was done to take action from this advice for over a decade. In 1956 Sex Education was included in official guidance in the fourth

edition of *The Handbook of Health Education* although Pilcher highlights it wasn't until the 1980s and 1990s that dramatic progress was made in the provision of RSE in schools. Despite this progress it is crucial to note that RSE was not compulsory in all British schools until September 2020. This long journey towards full compulsory RSE provision, now over 60 years in the making, has likely been slowed down due to persistent moral panics (Wellings et al., 2001). Instances of public anxiety over the moral wellbeing of young people have been common in the UK when it comes to sex and sexuality. Examples include Victoria Gillick's crusade to restrict minor's access to contraceptives in the 1980s (Olszynko-Gryn & Rusterholz, 2019), the Section 28 law which for 15 years, until 2003, prohibited local authorities from 'promoting homosexuality' (Moran, 2001) and protests in 2019 over Birmingham primary school's introduction of lessons including same sex families (Khan, 2020; Nottingham, 2020).

Much of UK RSE and narratives around young people's sexualities can be said to have been driven by these moral panics, with discourses around young people's sexualities becoming what Cohen would term 'folk devils' (Cohen, 2011). Wellings et al., (2001) have identified that from access to contraception and pre-marital sex in the 1960s – 1970s, through the HIV/AIDS pandemic in the 1980s - 1990s, into media panics over teenage pregnancy in the 1990s and rising STI rates among young people in the early 21st Century - the majority of school RSE has been reactionary to public health concerns. This furthers what Irvine (2009a) terms '*sex panic scripts*'. Irvine highlights that "*Sex panic scripts stress danger and disease. They employ provocative language and symbols, scapegoating, and depravity narratives*" (p.253). As I noted in my Masters dissertation, in each of these moral panics young people engaging in sex is assumed to lead to danger, disaster, and disease (Lawrence, 2018).

These sex panic scripts and moral panics have been linked to some countries utilization of abstinence-only RSE, particularly the United States (Herdt, 2009) where despite scientific findings that abstinence-only RSE ineffective, it prevailed due to the political power of sex panic scripts. Herdt suggests '*[...] these panics are explicitly used to achieve political hegemony. Sex education has been systematically destabilized in the United States through moral panics*' (2009; 2). Although abstinence-only RSE was not statutory in the UK, similar narratives were, until the new statutory guidelines were introduced (Department for Education, 2019), the primary discourse in UK sexual

education. These policies play into a popular political discourse of protecting 'family values', a vague moralising phrase which is often linked to protecting children and young people from immorality (Herdt, 2009). As Ringrose (2013) summarises '*moralising trends in the sexualisation panic resonate with explicitly protectionist UK sex education (RSE) policies and discourses*' (p.9).

Protectionist and 'family values' narratives build on the concept that children are innately innocent and asexual and exposure to knowledge of sex and sexuality may corrupt that innocence. The concept of 'childhood' has been tied to state controls and censorship since its emergence in the Victorian era, through the preoccupation with the protection of the innocence of children (Atkins & Mintcheva, 2006; Weeks, 1989). This innocence is built on the concept that young minds are vulnerable to negative stimuli and will recreate these stimuli in their thoughts and actions. As Levine (2002) suggests "*As is true of every obscenity charge, the nature of the harm is not physical or even measurable, but metaphysical: the content may cause bad thoughts.*" (p.10-11). This concern about trying to restrict knowledge around sex to protect innocence extends further back into academic tradition, Warner (1994) argued that:

"Many of these problems result from the concept that childhood and adult life are separate when they are in effect inextricably intertwined. Children aren't separate from adults, and unlike Mowgli or Peter Pan, can't be kept separate; they can't live innocent lives on behalf of adults, like [...] the best china kept in tissue in the cupboard." (p.45)

And as Janus and Bess (1981) also posited: "*One learns that what the adult world has established is an adult psychic censor that will not admit of children's growth and experience. Selective perception may becloud and avoid awareness of childhood sexuality, but it does not eliminate [that sexuality].*" (p.82).

The social construction of children and young people as innocent, may actively disadvantage them rather than protect them as intended. Levine (2002) touches on this in her book '*Harmful to minors: the perils of protecting children from sex*'. If children and young people are socially constructed as innocent and unaware, they may be perceived as easy targets by predators aiming to exploit their innocence. By protecting 'innocence', we may inadvertently put young people in more danger, marking them out as uneducated and vulnerable victims. Therefore, withholding age-appropriate

information may restrict young people's agency to protect and prepare themselves for encountering complex or traumatic situations, for which they have no reference point to navigate their own experiences (Lawrence, 2018).

However, especially for parents, concerns over young people's safety are a natural aspect of parenthood and the narratives of preservation of innocence and mediating risk form a part of how parents and other information gatekeepers aim to protect children. Although studies seem to show overwhelming support for what they feel is age-appropriate RSE (Allen, 1987; Kakavoulis, 2001; Tortolero et al., 2011; Walker, 2001; Robinson, Smith & Davies, 2017; Dent & Maloney, 2017; Cameron, Smith, Mercer & Sundstrom, 2020; Marshall, Hudson & Stigar, 2020; Lawrence, 2018), governments can be cautious around RSE curricula for fear of causing outrage from parents.

Parental objections to sex education do exist though. Goldman (2008) studied letters to the editor, parental conversations, television, and talk-back radio to identify and address twelve common parental objections to sex education. These included: *'If they are taught about sex they will go out and do it'*, *'Sexuality education should emphasise traditional moral values'*, *'It is the parents' duty to provide sexuality education for their own children'*, *'Only traditional biological education should be taught, with sex in a biological, not a moral, context'*, and *'Because children mature at different ages, no sexuality education syllabus can meet their differing intellectual, physical and emotional needs'*. (p.419). Yet Goldman argues that all twelve of the parental objections can be combatted with evidence-based and reasoned arguments. Bialystok (2018) has also observed the objections of parents who wish to opt out their children from mandatory RSE in Ontario, Canada. She suggests that to avoid parental right to opt-out from violating children's rights, the compromise should be that parental participation in sex education programmes should not be limited to just the option of opting out. Instead, Bialystok recommends parents are included in the development and discussions with schools and programme creators, so their concerns may be addressed. Bialystok's argument raises relevant debates for UK RSE where even under the new statutory guidance parents may opt-out of their child receiving the mandatory RSE lessons on sex up until three school terms before their 16th birthday (Department for Education, 2019). However, as Bialystok mentions (2018), parental

right to object to sex education should not be prioritised at the expense of their children's right to information that can impact their sexual health and wellbeing, and I will interrogate further who RSE is for in section 2.1.4.

2.1.2 Mediating Risk

Another key narrative related to many RSE programmes is risk (Ringrose, 2013; Lenskyj, 1991; Abel & Fitzgerald, 2006; Aapola, 1997; Allen, 2006; Shannon, 2016; Kantor & Lindberg, 2020) with teenage sex portrayed as dangerous (Chmielewski, Tolman & Kincaid, 2017). Sex is one of many moral panics associated with young people; concerns over risk taking are frequently linked with young people's leisure such as unsafe driving, gang culture, drugs, alcohol, or smoking (Mitchell et al., 2004; Denscombe, 2001; Green et al., 2017; Lanning, Melton & Abel, 2018). Therefore, many RSE programmes and health campaigns focus on the risk-factors associated with sex such as pregnancy and STIs (Lenskyj, 1990; Allen, 2006; Ringrose, 2013), and as such Ringrose (2013) proposes that in RSE "*The body is fragmented into discrete 'risky parts' to be managed.*" (p.53).

RSE interventions are frequently assessed by their impact on behaviour changes, which in this context usually means increased condom use, delayed first sexual intercourse, and generally reducing risk-taking behaviours related to sex (Stephenson et al., 2004; Lamb, Lustig & Graling, 2013, Hirst, 2013; Atkins & Bradford, 2013; Pound et al., 2017). One limitation of RSE programmes is that although they increase knowledge, they can have limited effects on young people's risk behaviour (Moran, 2002; Borgia et al., 2005; Stephenson et al., 2004). However, knowledge alone does not necessarily lead to behaviour changes (Kelly & Barker, 2016; Funke, 2017; Avis, McKinlay, & Smith, 1990).

There are various theories that contribute to our understanding of why this might be, for example Ajzen's theory of planned behaviour (Ajzen, 1991, 2011) states that behaviours are influenced by a person's attitudes, subjective social norms and how much they perceive themselves to have control over that behaviour, with these contributing to intention and affecting behaviour. Meanwhile, Bandura (1977) emphasised the impact of social influence and social environment on behaviour in his

social cognitive theory. These theories identify prominent elements of behavioral influence in social, environmental, and personal factors beyond knowledge acquisition and information exchange.

Ultimately, this means that assessing behaviour change alone (e.g., reduced age of first intercourse or increased condom use) as an indicator of effectiveness of RSE interventions may be problematic, as it may not consider alternative social factors, as Kelly and Barker (2016) highlight:

'Behaviour takes place in social environments and efforts to change it must therefore take account of the social context and the political and economic forces which act directly on people's health regardless of any individual choices that they may make about their own conduct.' (p.110)

RSE interventions that focus on behaviour change and do not take this into account may be missing a valuable piece of the puzzle in affecting behaviour change. As Bauer, Hammerli and Leeners (2020) address *"By providing a definition of sexuality that is limited to unhealthy aspects, this approach neglects the context of adolescents' everyday life."* (p.250). Behaviours and decision-making are not made in a vacuum; therefore, knowledge alone may not be enough to override the impacts of culture, family, and friends when it comes to making permanent changes in behaviour (Kelly & Barker, 2016).

Therefore, Denscombe (2001) advocates developing an alternative perspective on young people's health that avoids simply problematising risky social behaviour. He highlights that rarely in health education programmes is it asked what perceived benefits young people associate with the risk behaviours they engage with (Denscombe, 2001). Likewise, Shucksmith (2004) emphasises the need to consider why young people consider sex 'a risk worth taking'. What social, physical, and emotional benefits do young people believe they will receive in return for engaging in sexual 'risk' behaviours? (Such as not protecting from pregnancy/STIs, sexting, or engaging with intercourse at all).

Denscombe (2001) suggests that in the case of smoking, risk-taking behaviour was seen by 14-15-year-olds in his study as a form of constructing a self-identity as well as containing symbolic significance in the way their identity was perceived by others.

Further to this, the transition from childhood to adulthood is built on the '*development of autonomous action*' with young people often associating risk-taking with an expression of autonomy (Shucksmith 2004;10) and preparation for participation in adult society (Kloep et al., 2001). Wight and Henderson (2004) also noted this use of risk-behaviours in the construction of young people's identities, observing that the way heterosexual young people talk about their relationships and sexual activity has a strong link to constructing their social identities. Wight and Henderson noted heavily gendered discourses around relationships whereby for young men having sex is a way of establishing masculine identity among male peers due to a pressure amongst boys to lose their virginity and have multiple female sexual partners. Meanwhile a 'romantic discourse' was identified amongst young women that centred on monogamy and partnership - with sex understood as a symbol of intimacy and commitment. Attracting and keeping a boyfriend were central concerns for young women due to the social success, status, companionship, and affection that come from having a boyfriend (Wight & Henderson, 2004; 22).

Furthermore, Abel and Fitzgerald (2006) noted that young people in their study thought a sex education programme that focused on the risks and dangers of sex did not recognise that to young people putting sexual health advice into practice (e.g., wearing a condom) were perceived as a 'risk' to reputation which carried a greater repercussion in the everyday lives of the young people. Therefore, the risks of sex may seem less significant than the social risks of abstaining from sexual relationships for young people who are navigating 'uncertain identities' (Denscombe, 2001) as young people engage in a careful construction of identity amongst their peers (Warrington & Younger, 2011). For sexual health curriculums to target these risk-taking behaviours there is a need to deconstruct these ideas around identity with young people and identify alternative ways of building and maintaining their social identities. As Abel and Fitzgerald (2006) suggested, RSE programmes would be better focusing on negotiation skills, developing assertiveness, empowerment, and communication skills, rather than narratives of risk.

For young people sex is inherently risky, but some of those risks may seem exciting or enhance the adrenaline of the sexual situations. There is the risk of doing something their parents may not agree with, the risk of being caught engaging in masturbation or

intercourse with a partner when a parent may be elsewhere in the home, the risk of sexting or viewing pornography underage. Yet little time seems to be taken in RSE programmes to encourage young people to interrogate their risk-taking behaviours or offer alternative safer sex 'risks' (Abel & Fitzgerald, 2006; Allen & Carmody, 2012). As such, there is a need to step away from RSE interventions that centre purely on sex as risky and expand the narrative to consider the role of risk and young people's perceptions of the benefits of having, or how they have, sexual experiences.

2.1.3 Shame and Embarrassment

Although preservation of innocence and risk-management have a large part to play in the prevalence of sex panic scripts, they also hold a mirror to the way society views sex, and particularly premarital or casual sex (Commane, 2020; Irvine, 2018). Sex has historically been seen as 'of the body' and rhetoric around sex has been linked with ideas of giving in to carnal pleasures (Coveney & Bunton, 2003). These narratives fall into the realm of Cartesian Dualism (Baker & Morris, 1996), the idea that there is a split between the controlled immaterial substance of the mind and the unruly material substance of the body. This dualism can be seen in persistent social constructions of sex, where self-control of the pure mind over 'unclean' bodily desires is expected; a narrative frequently provided to young people surrounding sex and virginity. In this case the mind is presented as logical, rational, and controlled against the irrational, weak, leaky and passive body. As such the body, and thus sex, has been constructed as dirty (Irvine, 2009b) Historically and religiously, this can be demonstrated in prevalent ideologies of virginity as 'purity' (Cinthio, 2015; Awwad, 2011). Although these views are not necessarily the remaining dominant ideologies (Fernández-Villaverde, Greenwood & Guner, 2014), they remain for some, and their ripples can still be felt. The dominant historical and cultural perception of sex, and particularly sex for young people, as a risky practice and the antithesis of innocence and purity is part of a historical link between sex and shame (Irvine, 2009b).

It has been argued that shame narratives find their way into sex education (Shannon, 2016; Leahey, 2014), particularly where abstinence is prioritised (Hoefler & Hoefler, 2017). Shame has long been used as a social tool to quietly regulate and instigate control across society in a variety of contexts (Scheff, 1988; Braithwaite, 1993;

Holodynski & Kronast, 2009). Shame acts as a regulatory force, encouraging self-policing and self-governing behavior. As Hanson states, *'Shame may be, and often is, valued and deployed for political reasons, for its effectiveness in social management...'* (2009; p.134–136). Thus, the narratives in RSE that stress danger and risk in relation to sex may play into this encouragement of self-policing. This view of sex and sexuality directly contrasts media views of sex as exciting and pleasure-driven (Kunkel et al., 2007; Scarcelli, 2017) which young people are still exposed to (Buckingham & Bragg, 2004; Somers & Surmann, 2005; Collins, Martino, Elliott, & Miu, 2011). Children and young people live in an adult world where messages about sex surround them in media and advertising, yet adults may act as gatekeepers to sexual knowledge making sex a topic not to be spoken about and thus shameful, which may contribute to the reason that studies of youth opinions on RSE find embarrassment to be a common response (Forrest et al., 2004; Van Teijlingen et al., 2007; Pound, Langford & Campbell, 2016). Allen (2006) emphasises how traditional sex education materials in much of western society portray the body as desexualised and desensitised. She notes that illustrations provided to students are often diagrammatic, labelled with biological emphasis such as 'reproductive organs' and frequently contain internal views of organs presenting a body as if dissected. These choices are symbolic of the underlying ideology that these body parts are inappropriate in their natural form and must be made scientific. Limiting discussions on topics like pleasure, pornography, sexuality, and masturbation which re-embody sex could lead these topics to potentially become sites of shame for the young people who encounter these themes in their own lives but are not necessarily enabled to explore them within their learning environments with adult guidance (Irvine, 2009b)

As Prior (2013) summarises; *"Sexual panics about young people rely on the romantic and religious notion that sex (sexual intercourse), while empirically common among young people both historically and cross culturally, is shameful until adulthood"* (p.228). Irvine (2009a) has emphasised the affectivity of sex panic scripts and their power over thought and speech; *"Moreover, these social norms deeply affect the individual in the ways that they shape embodied feelings. Sex panic discourses authorise and legitimate particular ways of thinking and talking about sex in public"* (p.252). A further issue observed by Hobaica and Kwon (2017) was how absence of LGBT narratives in sex education led to sexual minority youth feeling shameful and sexually unprepared.

Although there is limited evidence-based literature exploring if other gaps in RSE provision (e.g., pleasure or desire) leads to feelings of sexual shame in young people, Saville Young, Moodley & Macleod (2019) have argued that *'silence around sexual desire, and particularly feminine sexual desire, indicates that shame is a central affect, albeit an unspoken one'* (p.494). This raises concerns around how young people may experience RSE and if current provisions are serving the best interests of their sexual wellbeing.

2.1.4 For whom and by whom?

To further question the suitability of RSE we need to interrogate what, and who, sex education is for. Is it for adults to risk-manage adolescent behaviours, for health professionals to reduce negative health outcomes or for young people to develop their understanding of the emotional and physical aspects of being participants in a sexual society? (Jones, 2011). Moran (2002) argues that traditional sex education has little effect on its audience and is a platform adults use to attempt the reformation of young people's sexual behaviour. He argues that there is limited evidence that sex education programs meet their goals and that they are far more telling of the values adults wish to impose on youth. Although 18 years have passed since Moran made this assertion, recent academic studies identify that emphasis in school sex education programmes still focuses on topics that suit adult agendas (e.g., risk) rather than the information needs of young people themselves (Bauer, Hammerli & Leeners, 2020; Kantor & Lindberg, 2020).

In addition, Wagener (1998) suggested that sexuality education is one of many ways that curriculums seek to govern the lives of young people:

"Particularly since the early decades of the twentieth century, curriculum technologies, such as those that clearly define, categorize, examine, evaluate, distinguish, and standardize appropriate and inappropriate behaviour, have enabled pedagogical practices, including those found in sexuality education, to participate in the multiple ways in which lives of school students are governed" (p.145)

It would be wrong to suggest that all adult agendas that govern youth sexual behaviour come from a place of intentionally wanting to limit or restrict young people. Protectionist

narratives exist because they are deemed by adults to be a way to protect young people from the risks and harms associated with sex (e.g., teenage pregnancy or STI transmission which have been a key focus of sex panic scripts). However, in an attempt to protect, RSE has predominantly focused on serving to reform the sexual behaviour of young people (Moran, 2002) by focusing on biological, risk-driven narratives (Lenskyj, 1990; Ringrose, 2013; Allen, 2006; Fine, 1988; Fine & McClelland, 2006; Bauer, Hammerli & Leeners, 2020; Kantor & Lindberg, 2020). Additionally, it has been noted that sexuality educators shape their educational practice based on their own biographical and moral understanding (Kehily, 2002; Albury, 2013; Abbott, Ellis & Abbott, 2015, 2016; Young, Moodley & Macleod, 2019) thus intentionally or inadvertently acting as gatekeepers to sexual health knowledge that young people are seeking ([see 2.2.2](#)).

Coleman and Roker (1998) Suggest that protectionist narratives should instead be addressing: *“at what age should young people be considered responsible for making decisions about their bodies and their lives, and how do we educate and support young people in their sexual development”* (p1). This ties in with the philosophy of Sexual and Reproductive Health Rights (SRHR). SRHR are the application of human rights to sexuality and reproductive health and the field of SRHR study is often focused within the context of international development. Berglas, Constantine & Ozer (2014) have proposed that this rights-based approach to sexual and reproductive health with young people can be defined as an intersection of four elements:

‘An underlying principle that youth have sexual rights; an expansion of programmatic goals beyond reducing unintended pregnancy and STDs [sexually transmitted diseases]; a broadening of curricular content to include such issues as gender norms, sexual orientation, sexual expression and pleasure, violence, and individual rights and responsibilities in relationships; and a participatory teaching strategy that engages youth in critical thinking about their sexuality and sexual choices’ (p. 63)

Traditional risk-adverse protectionist narratives have limited the SRHR of young people (Simovska & Kane, 2015), However, focusing on young people’s participation rights in policy and practice offers them opportunities to express themselves and their autonomy which are not commonly available to them (Prior, 2013) and the impact of

teaching programmes is higher when they meet adolescents needs (Bauer, Hammerli & Leeners, 2020). In framing this research from a SRHR perspective that assumes every young person deserves the right to information and support, we must ask what knowledge is not being transmitted, and who is or is not represented within current RSE provisions. Keeping these questions in mind, we will consider the evidence of what young people identify as their sexual health information needs and how they are not being met by RSE in the UK.

2.1.5 Youth sexual health information needs and the gaps in RSE

Health information needs are the application of information need to health and healthcare (Ormandy, 2010). Ormandy defines information need as:

“...a recognition that your knowledge is inadequate to satisfy a goal that you have, within the context/situation that you find yourself at a specific point in the time” (p. 99)

Ormandy then applies these principles to information needs of patients in a healthcare context to identify the way people may seek out information for the betterment of their health, and how the information sought may differ from that which healthcare professionals assume is important. Ormandy furthers;

“To meet information needs of the individual patient the content of information provided needs to focus on the patient not professional agenda. When information provision matches the information needs of patients the outcomes are generally reported positively” (2010; p.99-100)

Identifying the health information needs of young people offers us an opportunity to reframe our view of RSE with a Sexual and Reproductive Health Rights perspective, that values young people’s ability to identify their own information needs. So, what are those information needs?

The 2013 Ofsted report into PSHE showed that sexual health pedagogy in UK education has not consistently focused on the topics young people themselves require. When asked what they felt was missing from their RSE lessons and would benefit them the students in the report emphasised rape culture, recognising healthy relationships and ‘*The influence of the media such as porn on people’s views of sex and the human*

body' (OFSTED 2013; p.13). To further this, Bauer, Hammerli and Leeners (2020) found in relation to young people's unmet needs in Swiss sex education that most questions (35.8%) were about sexual interaction (e.g. topics such as oral sex, sex positions and the logistics of first-time sex), with 15.2% of questions relating to the body (e.g. anatomy and body hair), 13.9% of questions about relationships (e.g. love and dating). Other topics young people felt were unmet in RSE included ideal characteristics of men/women (10.5%), masturbation (10.1%), and pornography (7.3%). Bauer et al (2020) also noted that adolescents showed a high degree of interest in understanding the feelings and perceptions of the opposite sex and the emotional aspects of sex and relationships. A report into RSE needs for young people in the UK, and inclusive RSE by the Terrance Higgins Trust¹³ emphasised that young people wanted; an open space to talk about issues around sex and relationships as well as having a way to ask anonymous questions; lessons covering real-life situations, for example: one respondent shared that their school had brought in real life couples to answer students questions about sex and how valuable this had been; some students preferred RSE to be conducted by an outside educator and emphasised discomfort or awkwardness with and from teachers. (Terrance Higgins Trust, 2016). These findings all correlate with Pound, Langford and Campbell (2016) who found that young people were uncomfortable with being taught by their existing teachers due to their inability to discuss sex frankly or without embarrassment, further young people felt sex education was delivered too late and did not discuss the realities of sex, how to have sex, or make sex pleasurable and reported turning to pornography when this was not covered in RSE.

One interesting finding from Pound, Langford and Campbell's (2016) synthesis of 55 studies on young people's opinions of RSE, primarily from the UK and USA but including studies globally from countries such as Japan or Iran, was that despite the geographical reach of the studies included, the opinions expressed by young people were 'strikingly similar'. They noted that whether study participants had been exposed to abstinence-only or comprehensive RSE they still had similar opinions about the lack of emotional and practical guidance, frustration over risk narratives and concerns over teacher suitability or embarrassment. Despite the studies spanning a 25-year period

¹³ Terrence Higgins Trust is a British charity that campaigns about and provides services relating to HIV and sexual health

(1990 – 2015) Pound et al noted that changes in Governmental initiatives did not affect feedback, the only temporal change they saw reflected in the data across studies was as global cultural attitudes shifted in relation to consent and same sex relationships, students became more frustrated that RSE did not evolve to reflect these cultural changes.

Observing the patterns in young people’s information needs, it is often the personal, emotional, and social information needs relating to sex and relationships that are left unaddressed. Shannon (2016) has suggested that these social aspects of sex may be given less priority because *“Information that is not so easily ‘backed up’¹⁴ is not afforded the same degree of academic rigour in the classroom. Consequently, the exploration of the ‘social’ context of sex, including diverse expressions of sexuality and gender identity, tend to fall by the wayside”* (p.574). But the lack of social and experiential detail leaves young people unprepared for the reality of sexual experience (Cook & Wynn, 2020).

In addition to social and experiential topics, OFSTED (2013) noted many teachers lacked the expertise and training to teach on sensitive and controversial issues resulting in topics such as puberty, sexuality or domestic violence being avoided and suggested this may leave young people *‘vulnerable to inappropriate sexual behaviours and sexual exploitation’* (OFSTED, 2013; 7). The remainder of this section will identify four other sensitive topics that school-based RSE interventions may neglect to the detriment of young people’s sexual health information needs; pleasure, LGBTQ+ relationships, disability, and cultural and religious diversity around sex.

One topic that is often avoided in RSE is pleasure. Narratives of pleasure have long been absent in RSE at the expense of reproductive narratives (Lenskyj, 1990; Thorogood, 2000; Levine, 2002; Lamb, Lustig & Graling, 2013; Hirst, 2013; Sundaram & Sauntson, 2016; MacKenzie, Hedge & Enslin, 2017) that focus on a *‘pipes and prevention’* approach which emphasises only the biological (aka the internal ‘pipes’ of reproduction) and risk narratives for the ‘prevention’ of STIs and teenage pregnancy (Lenskyj, 1990). As Allen (2006) summarises *“as a result of this concentration on*

¹⁴ by ‘backed up’ Shannon is highlighting that social consequences and contexts of sex are not as easy to define using positivist empirical evidence, compared with typically quantifiable evidence such as reduction in STI transmission and teen pregnancy or increase in contraceptive use.

curtailing certain 'social problems', the positive exploration of desire and pleasure as part of sexuality has often been ignored or sidelined.” (p.182).

MacKenzie, Hedge and Enslin (2017) insist that the UK still urgently needs to revise RSE to include pleasure and desire, as well as the complexities of consent, rights, agency, and respect, however the updated statutory RSE guidelines (Department for Education, 2019) make no mention of 'pleasure'. This is particularly troublesome in the limiting ways RSE constructs female sexuality, as the focus on reproduction narratives and the exclusion of references to female pleasure and orgasm lead to an imbalance in how sex is presented between the genders, as Ringrose (2013) highlights:

‘Discussions of male sexuality thus contain overt reference to male arousal – erections and condoms – and the curriculum also contains references to ‘wet dreams’ which positions the sex drive as higher and more out of control for boys than girls and positions girls as at risk or/and moral regulators of such predatory and drive-based sexuality [...] However, while the mechanics of female reproduction (periods) are present, the mechanics of female arousal are often not.’ (p53)

Therefore, health and reproductive danger narratives are favoured, whilst discourses of female desire are missing in RSE or intrinsically tied with narratives of risk that stress pleasure as dangerous (Fine, 1988; Fine & McClelland, 2006; Lamb, Lustig and Graling, 2013; Lameiras-Fernández et al., 2021). This limits the SHRH of young women as Allen (2006) specifies; *“Given that the experience of sexual pleasure can have physical and mental health benefits, any omission to convey this to young women may potentially have negative effects for their sexual well-being.” (p.184).*

In addition to young people's information needs on pleasure being unmet, another area where RSE has often failed to meet young people's needs is around inclusivity of LGBTQ+ sex and relationships (Pingel et al., 2013; Abbott, Ellis & Abbott, 2015; Shannon, 2016; Terrance Higgins Trust, 2016; Hobaica & Kwon, 2017, Hobaica, Schofield & Kwon, 2019). This is largely because historically global RSE interventions have been based on normative and heteronormative assumptions of their audience. As Thorogood ventures,

“Sex education [...] becomes concerned with contraception and by implication hetero-sex, fertile sex and childbearing. This of course marginalizes all other forms of sexuality and defines them as against the ‘norm’ of monogamous, heterosexual, married fertile and penetrative sex.” (2000; p.433).

Shannon (2016) challenges notions of comprehensive RSE as ‘comprehensive for who?’, identifying gaps in provision for LGBTQ+ people in Australia and internationally. LGBTQ+ young people may also struggle to navigate the world when information about non-heterosexual relationships are withheld from them, Hobaica and Kwon (2017) noted that teenage LGB young people found RSE to be exclusive of their identities, making them feel invisible, sexually unprepared, and shameful. Young people in their study reported risky sexual behaviours, sexual hesitance, and experiences of sexual violence, as well as disclosing histories of depression, anxiety, and suicidality, often associated with their identity. Their respondents often turned to the internet or friends to search for alternative information. Meanwhile, transgender participants in Hobaica, Schofield and Kwon (2019) described sex education as being heteronormative and cisnormative¹⁵, providing insufficient information about trans¹⁶ individuals and experiences. They left the classroom ignorant of trans identities, with insufficient applied sexual health knowledge, and delayed understanding of their identity. Participants reported being unprepared for sexual encounters, with some describing negative and non-consensual encounters. For LGBTQ+ young people, especially those who are transgender or gender non-conforming, the assumption that they are too young to be educated about the spectrum of gender and sexuality may leave them isolated, confused and at risk of bullying from peers who may also lack understanding and empathy for difference (Proulx, Coulter, Egan, Matthews & Mair, 2019).

Absence of LGBTQ+ RSE in the UK is likely linked to the history of Section 28. Section 28 was a controversial ruling which prohibited local authorities from ‘promoting’ homosexuality to children between 1988 and 2003 (Macnair, 1989; Waites, 2000). However, despite the abolishment of Section 28 in 2003, many schools lack any kind of LGBT based education beyond the context of gay men and HIV risk (Terrance Higgins Trust, 2016). Whilst schools could have brought discourses around sexuality into the classroom after the abolishment of section 28, Sauntson (2020) has argued

¹⁵ Focused on people who are heterosexual and cis-gendered (not transgender)

¹⁶ Trans is an umbrella term for transgender and all other non-binary or gender fluid identities.

that residual language from section 28 has affected curriculum change and Pound, Langford and Campbell (2016) noted that changes to government policy had not made it into RSE practice, even up to 12 years later. In 2019 the UK Government included sexual orientation and gender identity within the updated RSE guidelines for the first time emphasising:

'All pupils should feel that the content is relevant to them and their developing sexuality. Sexual orientation and gender identity should be explored at a timely point and in a clear, sensitive and respectful manner. When teaching about these topics, it must be recognised that young people may be discovering or understanding their sexual orientation or gender identity. There should be an equal opportunity to explore the features of stable and healthy same sex relationships.' (Department for Education, 2019; p.26)

The introduction of these guidelines is a clear step away from the legacy of Section 28 towards inclusivity. However, there are some critiques which should be considered. In comparison statutory guidance for other subjects the guidance for RSE is vague and despite the potentially contentious nature of LGBTQ+ inclusive education, the guidance for its inclusion in RSE are limited. Below is one of 3 sections contained within the guidelines:

"At the point at which schools consider it appropriate to teach their pupils about LGBT, they should ensure that this content is fully integrated into their programmes of study for this area of the curriculum rather than delivered as a standalone unit or lesson. Schools are free to determine how they do this, and we expect all pupils to have been taught LGBT content at a timely point as part of this area of the curriculum." (Department for Education, 2019; 15)

These guidelines provide very little on the practicalities of including this within the curriculum and leave the bulk of decision making on these details to schools and educators themselves, which may lead to educator biases (Kehily, 2002; Albury, 2013; Abbott, Ellis & Abbott, 2015, 2016; Young, Moodley & Macleod, 2019), in addition Shannon (2016) argues that assimilating queer narratives into conventional RSE dialogue is a missed opportunity to develop student critical understandings of oppression and power.

Another area where RSE provision may not be meeting youth sexual health information needs is for those with special education needs and disability youth.

There has been a lack of adequate sex education for individuals with physical and intellectual disabilities (Grove, Morrison-Beedy, Kirby & Hess, 2018; Treacy, Taylor & Abernathy, 2018; Douglas-Scott, 2004; Adkins, 2018; Schaafsma, Kok, Stoffelen & Curfs; 2017). Treacy, Taylor and Abernathy (2018) have emphasised the lack of sex education for disabled people and emphasise that even when resources exist, those who need them may not have easy enough access to them. Douglas-Scott (2004; p.141-142) emphasises that *'people with learning difficulties are inherently sexual'* with the same sexual needs and interests as non-disabled people, however they are often infantilised or seen as asexual beings, therefore not fully represented within sexual health education discourses. He stresses that young people with learning disabilities may have greater needs for targeted sexual health information as cultural messages about sex and relationships can be confusing and contradictory and they may be more likely to be targets of sexual abuse due to their potential difficulties in understanding and communicating inappropriate sexual contact. Douglas-Scott adds *"the content of RSE for this group should not be any different from that of mainstream teaching, as everyone needs to know the same range of information about bodies, puberty, relationships, sex and sexuality [...]. It is the approach that is taken in relation to the individuals cognitive and other impairments that is the key."* (2004; p.146).

The new statutory RSE guidelines acknowledge that some pupils may be more vulnerable to exploitation, bullying and other issues due to the nature of their Special Education Needs and Disability (SEND), and that RSE can help support those with social, emotional and mental health needs to understand relationships and sexual health, As can be seen below;

"In special schools and for some SEND pupils in mainstream schools there may be a need to tailor content and teaching to meet the specific needs of pupils at different developmental stages. As with all teaching for these subjects, schools should ensure that their teaching is sensitive, age-appropriate, developmentally appropriate and delivered with reference to the law" (Department for Education, 2019; p.15)

However, as with the critique of LGBTQ+ guidance but the guidelines do not offer practical suggestions for how and when schools and educators can put this into practice.

Finally, RSE may need to be tailored for religious and ethnic minorities for whom topics such as sex may be culturally sensitive (Wong, Macpherson, Vahabi, & Li, 2017; Liamputtong & Wollersheim, 2016; Taragin-Zeller & Kasstan, 2020).

Patel-Kanwal (2004) highlighted that there can be considerable barriers to access to sexual health information for young people from Indian, Pakistani and Bangladeshi communities in the UK. This is largely due to a culture of silence which seeks to protect perceived honour or 'izzat' and avoid the shame or 'sharam' to be brought upon the family and wider community if young people are to engage in sexual activity before marriage (Patel-Kanwal, 2004). Parents are therefore unlikely to provide information as they believe it is not needed until marriage and young people may be removed from statutory school RSE lessons according to parental choice. However, although the topic of RSE can be considered contentious within some faith communities, Pound, Langford and Campbell (2016) noted that some young Muslim women appreciated RSE for the way it challenged the value-laden information they received at home. Patel-Kanwal (2004) also notes that due to the cultural and community pressures of not engaging in sexual activity these young people may not access alternative sexual health information at clinics or with healthcare providers for concerns over confidentiality. Beyond this, sexual health messages may not relevantly represent this group, be culturally appropriate, or may be located at 'inappropriate or inaccessible locations'.

Wong, Macpherson, Vahabi, and Li (2017) conducted a Canadian study on the sexuality and sexual health of Muslim young people and concluded that a lack of focus on the needs of this group poses a challenge to sex educators, policy makers and other stakeholders in the development of effective and inclusive sexual health programming for Muslim young people in Canada and other Western countries. Based on evidence from their study with Australian Muslim young women Meldrum, Liamputtong and Wollersheim (2016) emphasise that the influence of religion and culture cannot be ignored when conducting sex education. They draw on the work of Leininger and McFarland (1999) and the theory of Transcultural Nursing as an example of best practice for providing for the sexual health information needs of Muslim and other cultural or religious minorities. Transcultural Nursing is the practice of culturally congruent care that works with the cultural beliefs and practices of communities to

enable them to maintain their health. Meldrum, Liamputtong and Wollersheim apply this concept specifically to sexual health, emphasising the importance of RSE provision that is culturally relevant to these young people. Healthcare provision for Muslim populations often requires cultural awareness and sensitivity (Sunger & Bez, 2016; Tackett et al., 2018) however, Muslim and South East Asian communities are not the only religious and ethnic minority communities who may find RSE exclusionary. Taragin-Zeller and Kasstan (2020) identified for orthodox Jews in England and Israel a lack of cultural understanding of how religion plays into the life-stage sex education needs of this population such as the need for specific information in the lead up to marriage.

Whilst the UK Government are taking strides with making RSE more inclusive to these groups and information needs, due to vagueness in the updated guidelines there is little practical suggestion on how educators can embed these ideas into the limited curriculum time given to RSE. Although I believe RSE to be an important front which needs advancing, it is important to recognise that the multiplicity of youth sexual health information needs are unlikely to be able to be met during school hours. One that schools come up against is the practicality of how to provide education for students who may be diametrically opposed – e.g., acknowledging that for Muslim students same-sex relationships are against their religious beliefs, whilst ensuring that discussions about this do not lead to victimisation of LGBTQ+ students. These topics are challenging for both ‘sides’. Balkenhol, Mepschen and Duyvendak (2016) note that in sexually liberal societies sex education can lead to polarising and racist discourses which position Muslim citizens as remnants from an age of sexual oppression. This has also been observed in discussions of outrage over Canada’s implementation of new RSE guidelines in 2015, which led to narratives questioning the ‘Canadianness’ of recent immigrants and the perceived incompatibility of Canada’s liberal values with non-western, specifically Muslim, immigrants (Bialystok & Wright, 2019).

However, it has been argued that religious, cultural and social aspects of sex education do not have run in opposition to each other, with Löfgren-Mårtenson and Ouis (2019), in a study on intersectional RSE for those with intellectual disabilities from multicultural backgrounds, discussing the need for colleagues from multicultural backgrounds to act

as “culture bridges” to aid educators in delivering culturally sensitive RSE. Their suggestion is based on the idea that those with intimate knowledge of cultural needs can sensitively bridge gaps in need. However, one critique to be considered is that not all organisations will have available staff with the correct experience to act as culture bridges. This research looks at YouTube sex edutainment, which could also be utilised as a digital culture bridge not only for content with multicultural awareness but also other intersectional needs such as gender, sexuality and disability, for young people to relevant content and resources outside the classroom that are suitable to their sexual health information needs.

2.2 Young People, Social Media and Digital Intimacies

Social media forms an important part of the way young people socialise, seek information, build and maintain relationships. Today’s young people are increasingly performing their social interactions online through social media, with 87% of 12-15-year-olds using social media and 91% using messaging apps or sites according to the 2020/21 *Children and parents: media use and attitudes* OFCOM report (OFCEM, 2021). However, Scott et al., (2020) highlight that much of the research into young people’s digital intimacies focuses only on the problematic aspects and the risks and harms of these digital intimacies, ignoring the way technologies fit into the everyday lives, relationships and identity formation of young people. Livingstone (2008) suggested that social networking sites should be seen through a lens of being ‘risky opportunities’, recognising that the seeming ‘risks’ of online privacy and participation may be offering young people the exact opportunities for intimacy and self-expression that they seek (Livingstone, 2008; Livingstone & Helsper, 2007). Therefore, it is important to recognise that young people are often experienced at navigating these risky opportunities, as they do the other risks discussed in Section 2.1.2, and Albury (2017) argues, recognising young people’s sexual rights means recognising that it is not necessarily the business of adults to infringe upon the rights to digital participation of young people over the age of consent.

Young people use social media and technologies as a crucial part of their daily lives, to maintain and build friendships (Lange, 2007; Livingstone, 2008; Berger et al., 2021; Byron, Albury & Pym, 2021), locate health information (Rich et al., 2020), and engage in politics and social justice (Mendes, Ringrose & Keller, 2019; Keating & Melis, 2017; Kim & Ringrose, 2018). Young people may also utilise technologies for forms of digital intimacy, such as sexting (Albury, 2017; Ringrose & Harvey, 2015; Wilkinson et al., 2016), online dating (Byron, Albury & Pym, 2021), and mediating their relationships with their bodies through selfies (Wang et al., 2020; Ehlin, 2014; Chang et al., 2019)¹⁷. Allen (2013) has highlighted that the assemblage of young people and mobile phones demonstrates that youth sexualities are intrinsically intertwined with non-human matter by contemplating the idea of sexuality-as-assemblage, this highlights the critical role technologies play in the digital intimacies and developing sexualities of young people.

Beyond this, recent research has identified that social media can play an important role in young people's health information seeking, with the 2020 Digital Health Generation report on English young people aged 11 – 18, noting YouTube to be the most popular source of health information amongst young people, with 44% of survey respondents reporting use (Rich et al., 2020). In addition, when asked '*What kind of online content do you think has helped you understand health better?*' respondents selected YouTube over official information sources such as the NHS website or Web MD (Rich et al., 2020; 22-23).

Extending this into sexual health, studies have shown that young people use and value popular and online media as a source of sex education and sexual health information (Buckingham & Bragg, 2004; Pingel, Thomas, Harmell et al., 2013; Cohn & Richters, 2013; Masanet & Buckingham, 2015; Van Clief & Anemaat, 2020). Albury (2013) highlights that media-based sexual learning may offer young people representations of pleasure and desire which are frequently absent from traditional sex education curriculums, yet, research and school based education often only problematises the entanglement of youth sexualities with technologies (Scott et al., 2020). Now that many young people have access to sexual information via websites, pornography, and online

¹⁷ Further discussion of the media benefits and communicative practices around social media and sex edutainment content can be found in the next chapter.

forums, sexual health interventions need to evolve with media and young peoples digital intimacies to stay relevant and accessible to the lives of adolescents. The participatory, interactive nature of the internet generates a wealth of opportunity for serving young people. A growing number of sexual health resources are being developed through online platforms, from apps which share sexual health information through comedy (McKee et al., 2018) or by breaking taboos (Herbst, 2017), to uses of social media platforms like Facebook groups to provide sexual health information exchange (van Heijningen & van Clief, 2017) or YouTube sex edutainment (Johnston, 2017).

In a digitally connected world, the scope of learning and information seeking opportunities available to young people is greater than the limited options traditionally provided within a classroom-based curriculum (Waldman & Amazon-Brown, 2017). There is a growing body of work considering the benefits and challenges of digital sexual health interventions (Evans et al., 2013; Bailey, Mann, Wayal, Hunter, Free, Abraham & Murray, 2015; Herbst, 2017; Waldman & Amazon-Brown, 2017; McKee et al., 2018). Waldman and Amazon-Brown (2017) consider the ways digital methods of sharing sexual health information open avenues that traditional education methods cannot: *'Unlike traditional sources of sex education, the internet offers portability, anonymity, informality, 'personalised' responses, and the ability to interact with peers who are not local or part of face-to-face networks.'* (p23) and Herbst (2017) furthers additional advantages of these internet-based interventions:

"Their low cost; the potential for increased reach to remote and/or underserved populations; improved flexibility for programming, customising and tailoring information (compared to alternative supports, e.g. printed material); the information available becoming of universal value; the ability to provide standardised information; interactivity; privacy and autonomy, which allow for self-directed learning; and portability" (p45)

Waldman and Amazon-Brown (2017) highlight that digital interventions make sexual health information more freely available to difficult to reach and underserved populations, such as the use of mobile phones improving access to sexual health information in Kenya. This can also be seen in Adkins (2018) study on the ways deaf adolescents used social media to access sex education information and the

importance of accessibility measures such as captioning on videos to ensure that content can be consumed by those who are deaf or hard of hearing. It could therefore be argued that in the UK digital interventions may benefit the health information needs of young people opted out of RSE by their parents¹⁸, as well as those whose needs have been neglected by RSE, such as LGBTQ+ individuals.

Digital sources allow LGBTQ+ young people to access information specific to their needs online (Magee, Bigelow, DeHaan, & Mustanski, 2012; Pingel, Thomas, Harmell & Bauermeister, 2013; Manduley, Martens, Plante & Sultana, 2018; Nikkelen, van Oosten & van den Borne, 2020). For young LGBTQ+ people, digital technologies and social media provide access to friendships, relationships and wellbeing support (Berger et al., 2021; Byron, Albury & Pym, 2021), however, young LGBTQ+ individuals have identified that education related to online safety does not speak to them when it only focuses on 'risks' and 'dangers' rather than also potential feelings of safety and happiness stemming from identity affirmation and/or a sense of belonging and community online (Formby 2017; Hatchel, Subrahmanyam, & Birkett, 2016; Scott et al., 2020). LGBTQ+ communities are used to using the internet and social media 'by-and-for' initiatives to locate information and share activism around sexual health information (Magee, Bigelow, DeHaan & Mustanski, 2012; Manduley, Martens, Plante & Sultana, 2018) with LGBT youth five times as likely to search for health information online in comparison to their heterosexual counterparts (Manduley, Mertens, Plante & Sultana, 2018).

However, we must also be aware that digital technologies do not come without their own challenges when being inserted into the intimate lives of young people. Firstly, not all young people have access to the internet, and personal technologies in order to utilise them as part of their digital intimacies. The UK Consumer Digital Index (2018) found that while 99% of 11-18-year-olds surveyed had internet access at home, an estimated 60,000 did not have home internet access, indicating that we must acknowledge that digital technologies cannot meet the needs of all young people.

¹⁸ Under the 2019 statutory RSE guidance, parents may still remove their children from sex education lessons in RSE up until 3 terms before their 16th birthday. (Department for education 2019; 18)

In addition, the intricacies of how technologies fit into the intimate networks of young people need to be acknowledged. Byron, Albury and Evers (2013) and Byron (2015) noted in focus groups with Australian youth about the use of social media for sharing sexual health information, that young people were engaged in complicated processes of self-presentation on social media and the sharing of information about sexual health could invite risks such as stigma, bullying or gossip which they felt could jeopardise their belonging in their social networks. Meanwhile, McKee et al., (2018) found a dissonance in their research between the online platforms adult stakeholders who are often involved in the creation of content preferred, in this case locked down apps, to those that young people felt would be most accessible and valuable to them, such as YouTube videos which allowed them to easily share content with friends across social media platforms. The next chapter will explore in more detail the media benefits and challenges surrounding some of this media, but these studies highlight the need to hear from young people about how sexual health social media content and digital technologies fits into their lives and communication strategies, and this will be considered in the data collection of this thesis. Furthermore, this research aims to extend the literature presented in this section around young people's digital intimacies by interrogating the possibilities and problems of YouTube sex edutainment for British young people.

2.3 YouTube sex edutainment – Digital peer education?

The potential of YouTube as a sexual health tool that merges learning with entertainment has been relatively unexplored academically, with very few studies considering the pros and cons of this method of sexual health learning (Johnston, 2017; Prybutok, 2013; Venetis, 2018). However, McKee et al., (2018) found that young people may value the 'spreadability' provided by YouTube to share sexual health video content with their friends across multiple social media platforms. Johnston (2017) has emphasised the unique value of YouTube for sexual health opportunities due to the ability to mix education with entertainment, this builds on McKee's (2012) argument that entertainment media are essential in the ways young people seek sex and relationships information because they feel more enjoyable and relevant to them. McKee suggests that sex educators and researchers should seek to build mutually

productive relationships with media producers, not to change or alter what sex entertainment media producers create, but to draw upon the respective skills in order to fulfil young people's sexual health information needs. This research considers the affordances and challenges of YouTube for this purpose.

There is a growing range of educational videos about sex on YouTube. These videos, often delivered by friendly and approachable YouTube content creators (Johnston, 2017), can often garner a large following. Notable examples are Hannah Witton, Laci Green, Dr Lindsey Doe and Calum McSwigan, all of whom create videos on the site related to the topics of sex and relationships. Some would coin these creators Micro-celebrities (Senft, 2008), YouTube Stars (Johnston, 2017) or Influencers. Johnston (2017) has discussed how some YouTube sex edutainment creators achieve internet stardom while connecting with their audiences, gaining their trust and building a community online. Johnson suggests that when audience members circulate this video content, they themselves take a stake in the message.

Given Johnson's assertion, there is an interesting case to be made that YouTube sex edutainment could act as a form of peer education. There is no single widely accepted definition of peer education (McKeganey, 2000; Southgate & Aggleton, 2017), however for the sake of this thesis peer education can be understood as an approach to health promotion based on the sharing and teaching of health information between peers. Traditionally, peer education interventions in RSE are classroom-based exchanges where an older student or young adult is used to teach sex education content to make it more relatable to young people (Stephenson et al., 2003, 2004; Evans & Tripp, 2006). However, in this research I am interested to see how the role of the influencer in YouTube sex edutainment might mirror a similar social process in the virtual world, and how young people sharing content between themselves might constitute a peer education process.¹⁹ Maticka-Tyndale and Penwell Barnett (2010) summarise the underlying concept of peer education as being:

“based on the assumption that, especially among adolescents, peers learn from each other, are important influences on each other, and that norms and behaviors are most likely to change when liked and trusted group members take the lead in change.” (p.98).

¹⁹ Chapter 3 will consider if sex edutainment influencers might be able to act as peers and how social media fits in to young people's social and learning processes.

In addition, Rees et al., (2006) highlight that behind many of the educational theories applied in peer education programmes is a concept that teenage behaviour is informed only in part by knowledge and factors such as social environment and a young person's efficacy and skill in determining their own actions also contribute to behaviour. Thus, a peer education model aims to utilise social dynamics and oftentimes youth empowerment to improve decision making outcomes. As identified earlier in this chapter, the social contexts of young people are an important part of their risk-taking and digital intimacies, therefore understanding if YouTube sex edutainment might engage peer education processes by utilising existing online social connections gives us licence to explore how independent sexual health learning might disrupt and re-establish new narratives of peer education in an online context.

Peer education elements were found to be among the distinguishing characteristics of effective sex education programmes (Dyson et al., 2003; Mitchell, 1998), however, traditional classroom-based peer education interventions have come under various criticisms (Turner & Shepherd, 1999; Milburn 1995, 1996; Price & Knibbs, 2009). However, it is my suggestion that YouTube sex edutainment content may be able to bypass some of the issues traditional peer education interventions experience. Price and Knibbs (2009) have argued that peer-led interventions often only allow peers-educators to have limited role in the development, planning and content of interventions and *'although peer education is a methodology purportedly based on existing social relationships, it is often implemented as if in a social and power vacuum'* (p.294). Traditional classroom-based peer education programmes rely on artificially reconstructing a social process (Millburn, 1995) and although they aim to embrace the social contexts that may affect risk behaviours in the form of peer relationships, they are still operating within the same wider socio-historical contexts and educational systems explored at the beginning of this chapter, where content often must tow a delicate line of remaining 'appropriate'. An example of this is identified by Forrest (2004) who noted that peer-educators may be limited in talking openly:

'[...] peer education remains as susceptible as other approaches to societal difficulties with discussing sex and sexuality openly. 'Moralism' and continuing prejudice and inequality around gender and sexuality not only provide a poor basis on which to deal with sexual health issues but

may also place limits on what peer educators are allowed or feel that they can do, particularly in formal settings like schools'. (p.203)

This critique of the way wider social emotions about sex can play out in the classroom challenges the ability of peer education to fulfil its potential to address young people's information needs. While peer-educators may share some aspects of their experience (e.g., dealing with peer-pressure), they are not necessarily able to speak freely on topics like pleasure which may be blocked in a school setting, leaving some young people's information needs unanswered, hidden and taboo, even within a peer education model.

Whilst YouTube sex edutainment content has not been created with the intention of being a form of peer education, it may be able to alleviate some of these issues. Independent sexual health learning through YouTube sex edutainment removes the need for interventions to take place in a formal school setting where social discomforts persist (Forrest, 2004) and the perspectives shared in the online content can be more personal and honest between an sex education influencer and their audience (Johnston, 2017). Furthermore, YouTube sex edutainment may allow young people to participate in natural peer-sharing processes on social media rather than an artificially reconstructed social process that Milburn (1998) warns against in traditional peer education. The next chapter will consider how the para social relationships audiences build with influencers might lead to content creators taking a peer-influencer role. In addition, YouTube, with its integration across multiple social media platforms, may provide the opportunity for natural social sharing processes between young people as they already share YouTube content within their social networks (Lange, 2009; McKee et al., 2018) and theoretically, they could share this information to their friends via their social media channels, creating additional processes of peer education between young people.

If these peer education opportunities are present in YouTube sex edutainment this content could be a more efficient alternative to peer education, as Rees, Mellanby and Tripp (1998) noted that traditional peer education programmes have logistical difficulties for implementation and sustainability in schools because of the need for excess time and resources required to train peer educators who consistently need

replacing. This leaves challenges for the sustainability for these programmes as once researchers are no longer involved programmes may fizzle out due to their complexity (Rees, Mellanby & Tripp, 1998). Due to the challenge of recruiting and training peers and the additional time and expense this requires, peer education RSE projects are often only developed and undertaken at a local level (Forrest, 2004; 203). Therefore, one reason merging the principles of peer education with online interventions may be particularly beneficially is that a constant investment of time and resources into training peer educators could be replaced with uploaded video content on platforms like YouTube with no need for additional investment. This could also be much more scalable than previous localised peer education programmes, with the possibility for the same videos to be used throughout the UK, and accessed beyond).

There is a growing body of work into the use of social media to provide peer-support networks in alternative healthcare settings which could indicate that utilising social media interventions in sexual health care and promotion may be valuable. Grosberg et al., (2016) conducted a study of users on a Hebrew social health network with chronic conditions and found that frequency and duration of the social network use were correlated with increased knowledge about their chronic disease. Dhar et al., (2018) produced a pilot study using a Facebook peer-to-peer support group with liver transplant patients where 95% of respondents reported joining the group had a positive impact on their care and 97% reported that their main motivation for joining was to provide or receive support from other patients. The work of Vasilica (2015), Vasilica, Brettle and Ormandy (2020) and Vasilica and Ormandy (2017) found that a Facebook²⁰ peer-support group for chronic kidney disease patients increased self-efficacy of patients and that group members took on different levels of engagement within the community of the group to provide and receive support, with the peer-to-peer exchange of information contributing to satisfying patient information needs. Finally, Attai et al., (2015) found the use of twitter for peer-to-peer support with breast cancer patients to be an effective patient-education tool which increased patient-knowledge whilst reducing patient-reported anxiety. These studies into the effects of social media as a

²⁰ This research also looked at twitter and blogging, although Facebook was the preferred method for patients, seen as a replacement for forums due to its ease of access and ability to be used both for maintaining relationships with friends and for health information seeking and sharing (Vasilica, 2015)

tool for health learning and peer-support across various health conditions suggest that social media may offer positive impacts on patient engagement with their health and alternative means of health information seeking, however as they focused on adult populations these findings may not be representative of the target population of this study, although they provide interesting context of the field this research will contribute to.

Within the study of sex education and PSHE there have been a small number of studies exploring online spaces for peer education (Masanet & Buckingham, 2015; Jaganath et al., 2011; Palladino et al., 2012; Martin et al., 2020). Masanet and Buckingham (2015) identified that online fan forums for the television show *Skins*, which dealt with themes of sex, drugs and youth risk taking, were used for peer-to-peer sex education. Additionally, Palladino et al., (2012) noted positive results in using online peer education to prevent cyber bullying in Italy compared to their non-online control groups which indicate that there is valuable potential in combining these learning strategies. However, currently work in this area is limited and the scope of possibilities and how they may be practically achieved leave much room for academic exploration.

In interrogating the possibilities and problems of YouTube sex edutainment, this thesis intends to expand into this gap in literature, exploring how young people engage with sex edutainment influencers and seek and share sexual health information to identify if YouTube sex edutainment can combine peer education principles with the cheaper, flexible, interactive possibilities of online interventions (Herbst, 2017; Waldman & Amazon-Brown, 2017) and create opportunities for peer education to be explored as part of independent learning. Could YouTube sex edutainment influencers use their influence with their audience to act as alternative peer educators, and what might be the challenges of this? These questions will be explored in more depth in chapter 3 and through the data obtained in this research.

2.4 Conclusion

This chapter has laid the context around the history of and reception to RSE in the United Kingdom. The chapter has identified that for young people discovering their sexual selves there are many negative cultural perceptions to wade through which have systematically destabilised RSE; from sexual panic scripts, fears about teenage risk taking, to a cultural framing of sexuality as dirty and concealed. Although changes are being made to RSE provisions, this chapter has identified there are still gaps in providing for the sexual health information needs of young people on topics such as pleasure and the intersections where sex, sexuality, race, religion, and disability meet.

Therefore, this chapter has considered how young people utilise social media and digital technologies as part of their digital intimacies and to meet their information needs around sex, relationships and sexual health. Instead of traditional classroom-based RSE interventions this research looks to YouTube sex edutainment as a digital form of independent sexual health learning, and in this chapter I have suggested that this may also provide opportunities for an alternative form peer education to take place through engagement with sex edutainment influencers and the peer-sharing of their content between young people, which will be explored further in this thesis.

In figure 6 below, we can start to see the beginnings of how the literature in this chapter has allowed us to begin tracing the elements around young people, to understand how these may impact their participation in the YouTube sex edutainment assemblage. For example, if school policy and political and cultural attitudes to sex lead to young people feeling that their information needs around sex, relationships and sexual health are not met, this may lead them to seek this information online. Likewise, device access and internet access are also elements that may enable young people to participate in, or exclude them from, YouTube sex edutainment. This tracing of elements around the three key actors will be developed throughout this thesis, populating ANT webs for the tracing of connections found in both literature and data.

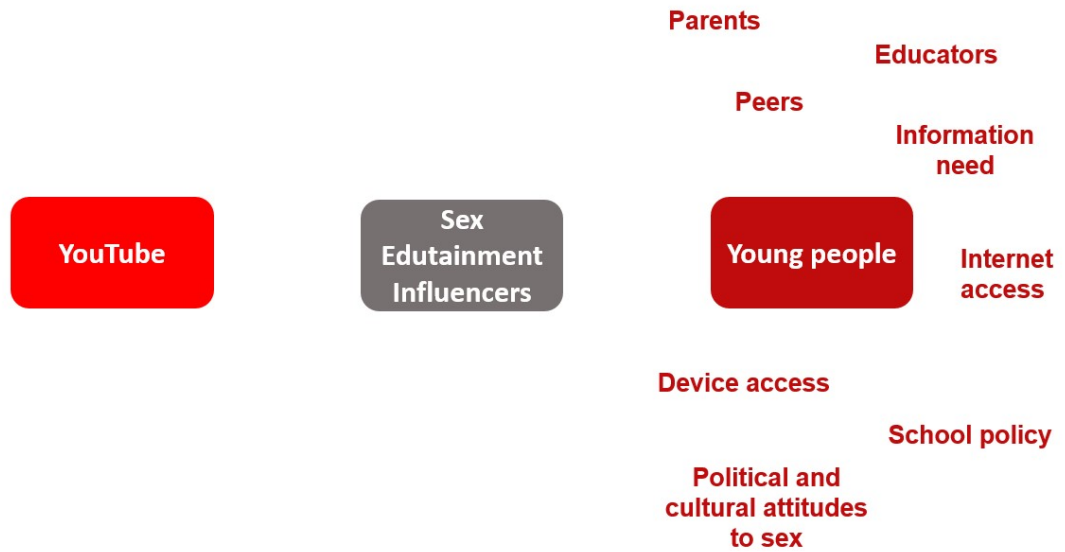


Figure 6 – ANT literature web stage 1

The next chapter will evaluate in depth the opportunities and challenges related to the YouTube platform, consider the role of YouTube and social media in young people’s learning and the media benefits they may experience from YouTube sex edutainment content. In addition, how influencers may play into and complicate peer education opportunities in sex edutainment, and why the hidden technological processes of platforms must be considered in social media research will be considered. The findings of a systematic review of the use of social media influencers in health will also be conducted to aid in understanding the role of social media influence in relation to health.

Chapter 3 - Possibilities and Problems of YouTube and Influencers

3.0 Introduction

Chapter 1 introduced the phenomenon of YouTube sex edutainment, whilst chapter 2 identified the cultural landscape surrounding RSE and the longstanding criticisms of traditional classroom based RSE interventions, touching on how YouTube sex edutainment may offer an alternative independent avenue for sexual health learning. Building on these chapters, this chapter will explore YouTube sex edutainment in further detail. YouTube sex edutainment is an assemblage created by the connections of multiple actors. Not only the three key actors identified in the introduction of this thesis (YouTube, Sex edutainment influencers and young people), but many other human and non-human actors that function below the surface of YouTube-based interventions which require consideration in developing an understanding of the possibilities and problems of using a social media platform like YouTube for sexual health learning. By the end of this chapter, a picture of these interrelated actors will have been built through the exploration of literature around the possibilities and problems of social media, influencers and YouTube.

The concept of the 'influencer' takes a central role in this chapter, therefore it is useful to acknowledge the semantics of choosing this word, the reason for its selection and what is inferred by it. People who create content on social media platforms such as YouTube are called by a number of names; influencers, social media influencers, content creators, YouTubers, social media entertainers, and so on. There are several terms which could have been used to describe those who create social media content to be distributed to a large audience they have built. The choice of the word influencer in this research is due to the balance it offers in meaning, Merriam-Webster online provides two definitions for the word 'influencer'.

- 1. one who exerts influence: a person who inspires or guides the actions of others*
- 2. a person who is able to generate interest in something (such as a consumer product) by posting about it on social media' (Merriam-Webster, 2020).*

Applying this definition to YouTube sex edutainment influencers we can see how both definitions apply. For example, these influencers are aiming to inspire and guide the

actions of their followers towards increased knowledge and positive sexual health outcomes. At the same time, they are generating interest in sexual health, but also sometimes link these videos to sponsorship of a relevant consumer product. A large portion of the academic literature surrounding influencer culture is dominated by marketing studies due to the interest in how influencers can impact purchase intention in their followers (Wiedmann, Hennigs & Langner, 2010; De Veirman, Cauberghe & Hudders, 2017; Gross & Wangenheim, 2018; Ki, Cuevas, Chong & Lim, 2020). Yet the sociology of the influencer and their influence is far more nuanced than reducing them to the internet equivalent of a car salesperson (Abidin, 2016; Khamis, Ang & Welling, 2017; van Driel & Dumitrica, 2020). 'Influence' is an ambiguous word, we cannot easily measure influence by a number of followers or likes, yet marketers are increasingly using social media influencers as a form of advertiser (Appel, Grewal, Hadi, et al., 2020; Kieley, 2019). To reach the point where an account is considered popular enough to influence purchase decisions, they will already have been influencing their audience through the development of a trust relationship (Cunningham & Craig, 2017; Berryman & Kavka, 2017). Yet, as this chapter will explore, the marketising of an influencers audience may present challenges in using YouTube sex edutainment as a wider educational resource.

This chapter begins by debating the advantages and disadvantages of online learning processes, and their relation to sexual health learning, before examining how internet and media circuits play into the communicative practices of young people. The chapter will then consider the role of the influencers who create YouTube sex edutainment content, how authenticity and accessibility are interpreted by their audiences, the potential peer-role they play and the ways that this may be complicated by their relationship to advertising revenue, sponsored partnerships with brands and other factors. Following on from this an interrogation of how human and non-human platform governance, in the form of policy and algorithms, may influence the access to sex edutainment content on YouTube will be considered. Finally, through a systematic review, what is known about the use of social media influencers as health influencers is explored to provide insights for the development of this research.

3.1 YouTube Learning

Online digital media have opened alternative avenues for sexual health learning outside of the classroom (Waldman & Amazon-Brown, 2017; Mckee et al., 2018), but what is it about these online platforms, and YouTube specifically, that make them suited to offering alternative forms of learning? Learning is increasingly entangled with the internet – both in the classroom and outside (Clifton & Mann, 2011; Rapp et al., 2016; Moghavvemi et al., 2018; Tan, 2013) as young people are using YouTube not only as a form of entertainment but also for instruction (Burgess & Green, 2009; Tolson 2010). It has been suggested that online Web 2.0 environments can become new forms of learning environments or *learning ecologies* (Duffy, 2008; Brown, 2002). David Beer (2009) summarises web 2.0 as “*In general terms, Web 2.0 is a concept that forms part of the lexicon of a range of emerging accounts that commentate on a large-scale shift toward a ‘participatory’ and ‘collaborative’ version of the web, where users are able to get involved and create content*” (p.986). Duffy and Brown suggest that these Web 2.0 participatory online environments allow for alternative engaging learning environments, when integrated within a well-considered framework. YouTube sits firmly within this Web 2.0 learning ecology and has been studied for its application in the classroom (Dreon, Kerper & Landis, 2011) as a source of digital storytelling, and its use for learner-generated video learning (Orus et al., 2016) was found to have positive impact on students learning outcomes and satisfaction. Rapp et al., (2016) noted YouTube to be the most used educational video source for surgical preparation in medical students (95% of students using video resources used YouTube compared to 38% using the second most popular video source). Whilst Moghavvemi et al., (2018) observed that university students in their study used YouTube for entertainment, information seeking and academic learning, and recommended the integration of YouTube into course materials, and Noetel et al (2020) identified through their systematic review that adding video content to existing teaching in higher education led to strong learning benefits.

It has previously been considered that video-based media such as television, whilst providing opportunities for learning, does so in a passive manner that does not stimulate higher cognitive processes such as reasoning, thinking and problem solving (Jonassen, 1981). However, it has also been argued that television is not necessarily

a passive medium, and that to achieve learning outcomes from television-based media, the extent of the users' engagement is crucial (Moeller, 1996). YouTube has been considered by some as a form of 'post-television' due to the way the viewing experience emphasises active viewership over passive consumption by the searching of specific content, engaging in discussion, rating, content sharing and content creation (Tolson, 2010; Strangelove, 2015). Noetel et al., (2020) noted that asynchronous video learning may allow learners more control over their learning, as students are able to pause to take notes, rewind difficult sections, or fast forward through easy segments to adapt the learning experience to their own abilities, helping students manage cognitive load and avoid overwhelm. Noetel et al's argument could be extended by considering if asynchronous video learning is also beneficial for students to learn where and when suits them. In the context of the COVID-19 pandemic, video learning has become essential to schools and learners at all levels of the education system by allowing access to learning materials from outside traditional education settings, such as at home. Beyond COVID-19 this ability to access video learning materials, could have additional privacy benefits for young people using asynchronous video learning like YouTube to find answers to questions about sexual health and relationships, due to the intimate nature of the topic.

Brame (2016), in reviewing factors impacting student engagement of educational videos, noted that videos under 6 minutes in length tended to be watched to the end and that conversational tone improved student engagement with video content, as did the speed of that conversational tone – contrary to what might be assumed, a quicker pace of speech led to greater engagement from those watching. Brame also notes the value of signalling key information with key words and illustrations on the screen to minimise extraneous cognitive load during the learning process. Although Brame was reviewing literature to understand the suitability of video learning resources for teaching biology in Higher Education, each of the factors described above are common features used in YouTube sex edutainment content and demonstrates that these features may be of interest in their use as learning resources. Brame (2016) gives several evidence-based suggestions for how educators can improve active learning through video resources, including using interactive features to annotate videos with questions or break video lectures into labelled chapters, using guiding questions to focus learning and note-taking, and making videos part of larger homework

assignments. Although this research does not focus on YouTube sex edutainment as a classroom resource, recognising the possible learning opportunities and how YouTube sex edutainment might be utilised both in classroom settings and by individuals is likely to form part of the discussion around the possibilities of use for this content.

Whether YouTube is a platform for active or passive learning, it is a learning environment that supports independent learning (Tan, 2013; Hattingh, 2017; Shariff & Shah, 2019). Learners frequently interact with each other in these spaces to create community and informal peer learning (Duncum, 2011; Tan, 2013; Hattingh, 2017). Informal learning and instructional content take many forms on YouTube. For example, tutorials have become a staple of YouTube content, with make-up tutorials forming a part of the explosion of user-generated content that gave the platform its unique identity (Burgess & Green, 2009; Tolson, 2010; Morris & Anderson, 2015), although gameplay walkthroughs²¹ (Morris & Anderson 2015) and other forms of DIY instruction have also been part of this, alongside vlogging (video blogging) where users talk direct to camera and often share about their personal lived experiences (Sangeorzan, Andriopoulou & Livanou, 2019; Gibson, 2016). Therefore, on YouTube, 'learning' can range from formal to conversational, about traditional topics of learning or unconventional instruction.

However, this variety of user-generated content can be problematic, many studies have raised questions about the varied quality across videos which may not be factually vetted and can contain factual inaccuracies (Gabarron, Fernandez-Luque, Armayones & Lau, 2013; Lim, Kilpatrick, Storr & Seale, 2018; ReFaey et al., 2018). A further discussion on the concerns around factual inaccuracy in YouTube health information can be found later in this chapter in [3.4.1](#), whilst interrogating the qualifications of influencers. Yet Tan (2013) found that college students employed a range of strategies to independently assess the value and accuracy of sources when seeking their own learning resources. One interesting finding of YouTube learning was that students did not necessarily view YouTube independent learning as highly as traditional classroom-based learning (Tan, 2013). Tan suggests that this is because

²¹ Video content where the video creator films themselves playing video games, with the intent of entertaining the audience, demonstrating the game features or teaching them how to play a difficult level in the game.

students independent YouTube learning lacks the traditional markers of assessment. In contrast, Pratama, Hartanto & Kusumawardani (2018) found that YouTube led to greater motivation for learning in their study of how a YouTube audio production education channel improved learning, however while this provides an alternative perspective it focused on a specialist topic that may not be widely applicable. These studies provide promising findings on YouTube as a peer-learning strategy yet emphasise that Web 2.0 learning ecologies are not necessarily without their complications. This research aims to contribute further to the understanding the role of YouTube as a sexual health learning ecology, and further interrogation of YouTube as a suitable learning space for 13-24-year-olds will be conducted as part of this study.

3.2 Unschooling sex; democratic learning?

In considering the opportunities for YouTube sex edutainment it is important to ask, what benefits might young people experience from this content that they do not get from traditional school based RSE? As literature in chapter 2 identified, there are gaps in provision of classroom RSE, therefore this section questions if internet-mediated independent learning offers more democratic access to information about sex and relationships in light of absences in curriculum content.

The YouTube sex edutainment content at the heart of this thesis can be characterised as informal (Johnston, 2017), due to the relaxed talk-to-camera method of delivery, and the ability for users to access the advice and information from the informal environment of their own homes. Some young people find school-based RSE embarrassing (Woodcock, Stenner & Ingham, 1992; Teijlingen et al., 2007; Pound, Langford & Campbell, 2016) or experience discomfort at being educated in mixed-sex groups (Strange et al., 2003, Pound et al., 2017), and this informality may be beneficial in addressing those concerns, however could the lack of formality redress imbalances of power between learners and those providing information?

Tolson (2010) discusses that in traditional media regimes such as make-over television, the presenter and their team of specialists (in this case stylists, hairdressers, make-up artists, plastic surgeons) are positioned as experts, in comparison to the 'hapless guest' who is presented as lacking the knowledge to transform themselves. Tolson argues that in comparison, on YouTube the special class of 'expert' is removed.

In make-up tutorials he notes the power dynamic is changed, and the viewer replaces the make-over guest becoming engaged in their own transformation by learning to apply the make-up or style decisions themselves.

This change in media narratives falls into what some have referred to as a democratisation of the internet, both politically (Shirky, 2008, 2011; Castells, 2012) and in terms of user-driven interaction and the creation of celebrities (Simpson, 2009). Beer (2009) suggests a rhetoric of democratisation has been applied to the internet due to the shift towards user-generated content, the idea of people reclaiming the internet, and the move towards the social in Web 2.0. If we consider the internet as an alternative learning space, it is conceivable that the make-up tutorials described by Tolson offer a redistribution of power in the relationship between the knowledge sharer and the learner.

Considering the application of this to sex education, where the power balance in traditional RSE is often weighted towards 'experts' (e.g. teachers or sex educators) imparting knowledge, it is interesting to consider how the role of sex edutainment influencer, who takes on the performative role between peer and 'expert' and is arguably not quite fully either²², may offer a form of empowerment for teenage learners. This is because in this context young people are not having knowledge imposed upon them with learning outcomes but can actively search for answers to their questions or find them through recommendation algorithms. Therefore, becomes a form of independent learning, utilising the interactivity possible through the social media features of YouTube such as commenting, liking and sharing. As Tolson suggests of YouTube: "*Crucially it is the computer user, not the institution, that makes the connections*" (Tolson, 2010; 285), therefore, through the post-television experience YouTube provides, the audience are enabled to become actors within the media learning assemblage rather than passive viewers to a traditional media outlet:

"In classic television, viewers are presented with pre-produced, pre-edited, programmes designed for particular time-slots; in post-television users construct their own viewing experiences, from user-generated videos which (at least in these make-up tutorials) have no prior institutional imprint." (2010; p.285).

²² Section 3.4.1 will discuss in further detail whether Sex edutainment influencers are qualified to be considered experts, however to an uneducated viewer watching an influencer video to consume information they may still be perceived as an expert, or they may attempt to construct themselves as an expert.

As such, YouTube sex edutainment learning allows users to construct their own learning experiences from user-generated videos which often have no prior institutional imprint. With social media users can comment or message the influencer to request content or give ideas about what they would like to learn²³ (Johnston, 2017). In a conventional school setting this is not common – curriculums tend to be fixed and teachers are teaching from the educational policy approved by their institution, its governors and local authority (Wilkinson, 2017). UK RSE therefore largely appears to lack the interactivity between learner and educator where learners shape the curriculum, demonstrated by reports that young people feel RSE practice is not relevant to the realities of their lives (OFSTED, 2013; Terrance Higgins Trust, 2016; OFSTED, 2021)

Thus, YouTube-based social media interventions may offer a shift from top-down education to a grassroots approach to education. Paulo Freire's pedagogy of the oppressed (1970) encourages a shift from viewing education as filling empty vessels (aka students) with knowledge, to embracing learners as co-creators of knowledge. Yet parallels can be drawn if we apply this process to young people and sexual health learning. As outlined in the previous chapter ([section 2.1.1](#)) there has been a long history of preoccupation with the protection of innocence of children and young people, leading to moral panics around the corruption of young people with sex and sexuality, and a reluctance to be too wide reaching in terms of education. Therefore, giving young people a choice to access sexual health information as self-directed learning through platforms such as YouTube could be considered a rejection of young people's role as innocent 'objects' to be protected from sexual knowledge towards becoming engaged and active sexual citizens.

Despite the benefits it can offer, there is a large body of academic work which warns us away from viewing the internet and social media through the rose-coloured glasses of democratisation. Turner (2004) introduced the concept of a 'demotic turn' in the creation of celebrity. This concept of demotic celebrification observes the turning of celebrity towards 'reality' and everyday people, amplified through the lens of reality TV

²³ Although influencers may turn off commenting on a video, commenting is part of the ways influencers show engagement which they use for gaining paid sponsorships and brand deals, so this open form of contact is frequently maintained (Ladhari, Massa & Skandrani, 2020).

and now increasingly online social media content (Rocavert, 2019; Hou, 2019). However, Turner also argues strongly against the notion that online participation of user-generated content makes it more democratic (Turner, 2004, 2006) and Hou (2019) suggests that although YouTube may allow the bypassing of traditional media governance, YouTube itself has become an industrialised celebrity manufacturer with its own forms of governance. Curran, Fenton and Freedman (2016) challenge the deterministic history towards the internet and social media, highlighting the way inequalities, censorship and social context affect the internet's potential. They suggest the future of the internet is dependent on its management. Due to the way RSE has been limited by censorship and governance throughout its history, it is crucial to consider the ways the internet may have alternative forms of censorship and management and how these may affect online sexual learning. We cannot blindly view the internet as neutral ground, as it is subject to its own social contexts just as much as the classroom. Sections [3.5](#) and [3.6](#) of this chapter will explore how management of YouTube as an internet space affects the sexual learning that takes place there.

If platforms like YouTube make learning more democratic is uncertain but asking how young people are accessing sexual health information online and why, from their perspective, is an important factor that will be carried forward into this research. Presently there have been no studies exploring young people's self-directed sexual learning on YouTube and although the potential benefits can be theorised, without understanding if young people are engaging in this learning and why, it will remain purely theoretical.

3.3 Media benefits and communicative practices

The way that social media fits into the lives, politics and relationships of young people and the role it fulfils has been widely theorised (Kofoed & Larsen, 2016; Ellison, Blackwell, Lampe & Trieu, 2016; Eleuteri, Saladino & Verrastro, 2017; Middaugh, Schofield Clark, & Ballard, 2017; Chmielewska & Jędrzejko, 2019; Dennen, Choi & Word, 2020). Considering the purpose that media serves for an individual, or its 'media utility', can help us understand youth consumption of sex edutainment video content on YouTube. Why young people might choose to watch or share a YouTube video and what they get from the interaction tells us a lot about the potential benefits

of YouTube sex edutainment, and if young people may consider sharing this content with their peers. Rouse (1991) described the connections between people made via media as 'Media circuits' due to the way media can connect people within a group to interact. Although Rouse's original observation of media circuits was based on telephone communication, Lange (2007) suggests that interconnections through YouTube video sharing and commenting can also constitute media circuits. Analysing a media circuit and the way it is used can shed light on the social dynamics of those using the media (Lange, 2009). Just as media circuits are made through the connection of people and media, Actor-Network Theory (ANT) traces connections between people, objects and other non-human entities. This research uses ANT to trace connections around YouTube sex edutainment and identify how and why young people share social media relating to sexual health with their friends.

Whilst there are no current studies identifying the specific media utility young people achieve from YouTube sex edutainment or social media sex education content, this section will draw on related literature to theorise the potential media benefits of social media communicative practices and how these may shape the quality of opportunities for sexual health learning.

Firstly, one dominant media utility to be examined is how social media processes contribute to socialisation. Social media platforms offer users the opportunity to engage in networked publics (Boyd, 2008, 2010). Boyd (2008) defines networked publics as *'the spaces and audiences that are bound together through technological networks (i.e. the Internet, mobile networks, etc.). Networked publics are one type of mediated public; the network mediates the interactions between members of the public'* (p.125). Boyd argues that social media platforms, as networked publics, aid in socialisation and the building of social identities for teenagers. Likewise, Lange (2007) suggests that youth and young adults use video sharing from YouTube as a process of socialisation, with commenting and video sharing features on the site used to *'project identities that affiliate with particular social groups'* (p361).

What socialisation processes might young people find around YouTube sex edutainment content? There are many ways that users can engage or disengage via social media, and both Light (2014) and Lange (2007) have suggested that the nuances between public and private engagement and sharing on social media may

reflect upon friendships and how they are enacted. Nardi (2005) argues that these exchanges are not focused on information gathering, rather they strive to establish an “affinity,” which Nardi defines as a “*feeling of connection*” between people who “[*experience*] an openness to interacting with another person” (p92). The sharing of sex and relationships content could theoretically be used to strengthen existing connections between friends by sharing videos or channels that are relevant to a friend’s problems to show a duty of care and bring a friendship closer. Nardi’s suggestion can also be applied to consider alternative forms of affinity that may be felt beyond existing friendship networks. Due to the ability to comment and engage on YouTube videos, those viewing sex and relationships content on YouTube may be focused not only on gathering sexual health information but also connecting with others in similar situations through the comments. They may find affinity with other commenters through sharing their relationship and sex experiences, providing peer support or community building (Nash, Rosenberg & Kleitsch, 2015) or bonding over the celebrity of the influencer (Hattingh, 2017). These potential socialisation benefits could make YouTube a valuable platform for peer education and peer engagement around sex edutainment content, which may be particularly valuable for those aged 18 – 24 who can no longer engage with RSE in a school context, providing them with a possible continued outlet for engagement with sexual health and wellbeing learning. However, further research needs to be conducted with young people to verify if these theoretical benefits are accurate, which this research does in chapters 6 and 7.

Returning to the media benefits of the internet and YouTube for sex education, one potential benefit is anonymity. Davis (2012) notes that although true anonymity is increasingly difficult to achieve online, people can often feel a sense of anonymity in their online interactions. This perceived anonymity may encourage a form of liberation that emboldens sharing and exploration unlike that expressed in the ‘real’ world. Anonymity may be perceived as beneficial to young people seeking information about sex, as the topic can be seen as embarrassing (Woodcock, Stenner & Ingham, 1992; Teijlingen et al., 2007; Pound, Langford & Campbell, 2016). Furthermore, young people can be concerned if questions posed to teachers will be treated with confidence (Pound, Langford & Campbell, 2016). Ellison, Blackwell, Lampe & Trieu (2016) noted that anonymity is used strategically by adolescents, allowing them to seek information about ‘taboo’ topics. Therefore, the potential for anonymity on the internet may be

preferable to young people. However, there are concerns to be raised here. Internet anonymity means that it is harder to ensure that young people are safe online, provides difficulty in ensuring the information they are receiving is accurate and reputable and some may utilise anonymity as an opportunity to demean others and regulate expressions of gender and sexuality (Patchin & Hinduja, 2006; Rivers, 2013) which may cause emotional harm at a sensitive stage of development.

In addition to anonymity, another media utility to consider is how YouTube may fit into identity formation for young people. Moris and Anderson (2015) noted that YouTube content may offer alternative modes of being and identity formation for young people, as their study of prominent British, male, YouTube influencers identified public performances of softer heterosexual masculinities and they suggest this offered heterosexual male youth inclusive role models for their developing identities. Cunningham and Craig (2017) suggest that one of YouTube's successes is how it has built strong digital communities. This community aspect could be beneficial to young people who are likely to be in their formative years where peer-relationships take a central role in their lives, thus, belonging to an online community may appeal to them. Influencers not only co-create a community with their audiences through the participatory culture of YouTube (Burgess & Green, 2009), some also allow their audience to see them with their personal communities. Many influencers do collaborations with other similar influencers (Lange, 2019; Johnston, 2017), creating a form of inner circle which the audience is invited to be part of through the viewing of their videos or live video sessions (Johnston, 2017). This may encourage viewers to feel that they are part of this participatory culture, therefore even if young people are not sharing information they find with their offline friends, they could be engaging in peer-support communities online where they can communicate about potentially taboo healthcare topics, as has already been demonstrated in mental health (Sangeorzan, Andriopoulou & Livanou, 2019; Naslund, Grande, Aschbrenner & Elwyn, 2014), sexuality (Cover, Aggleton & Clarke, 2020), chronic illness (Isika, Mendoza & Bosua, 2019) and HIV (Jindal & Liao, 2018) communities on YouTube. Engagement in sexual health peer-support communities may also reduce shame around sex and sexuality for young people, in the same way Jindal & Liao (2018) observed that watching YouTube vloggers sharing their experiences of being HIV positive reduced audience stigma and shame around the condition. Therefore, these communities may offer not only a sense

of belonging to a wider community of support, but a place to reclaim identity around elements of themselves where they may otherwise have felt stigma or embarrassment.

3.4 Influencers: Peers or problematic?

The previous chapter suggested that social media interventions on YouTube may provide an opportunity for young people to share sex edutainment content with their peers. However, the opportunity for YouTube sex edutainment as an alternative form of peer education may be two-fold. One area that warrants exploration is if YouTube sex edutainment influencers can provide an alternative to traditional peer educators by taking on the role of health influencer. In traditional peer education programmes an older peer or person from a similar group or social status is usually trained to deliver RSE content with the aim of influencing learners (Stephenson, 2004; Evans & Tripp, 2006; Maticka-Tyndale & Penwell Barnett, 2010; Southgate & Aggleton, 2017). The following paragraphs will explore ways YouTube influencers may become peer-like health influencers through their presentations of 'authenticity' and 'accessibility' to develop audience trust.

Sex edutainment influencers frequently use a vlogging style (Johnston, 2017) which utilises informal language, personal experiences and 'conversational character' (Burgess & Green, 2009) with direct to camera address mimicking face-to-face conversation. This feeds into a view of the influencer as approachable and authentic (Tolson, 2010; Cunningham & Craig, 2017). Authenticity is considered essential in the construction of celebrity (Dyer, 1991; Marshall, 1997) and influencers frequently draw attention to their ordinariness as a marker of authenticity (Tolson, 2010). Tolson summarises "*Thus the authenticity of vlogging, if it is to be perceived as such, is located in its excessive direct address, in its transparent amateurishness and in the sheer volume and immediacy of 'conversational' responses.*" (p.286). Thus, in comparison to traditional media entertainment where entertainers are inaccessible, seem scripted and inauthentic, social media influencers brand themselves as authentic everyday people situated within a community, no different from the viewers watching (Cunningham & Craig, 2017).

McCormack (2011) argues that for adolescents popularity is secured by four key character traits: charisma, providing emotional support, social fluidity and authenticity. Arguably sex edutainment YouTubers offer charismatic content to provide emotional and practical support to young people in a manner which emphasises their authenticity and approachability, which explains their potential popularity with young people. However, it is important to bear in mind that authenticity is a relative concept (Montgomery, 2001) which, much like influence, cannot be easily quantified or measured due to its subjectivity. Furthermore, online media change the 'situational geography'²⁴ of social interactions between strangers (Meyrowitz, 1986; Papacharissi, 2009), redefining the boundaries between strangers, and in the case of Sex edutainment influencers these individuals are making that which is considered the most private (sex) become public. Because of this we must consider the protections influencers put in place for themselves, such as developing forms of public alter-ego, and ask; how much does the audience, particularly a young audience, recognise the performance of self that social media allows when it comes to influencers? (Donath & boyd, 2004; Papacharissi, 2002a, 2002b, 2009). Goffman (1959) suggested that self-presentation is often performative, and social media sites are often built on a notion of performative self-presentation online (Papacharissi, 2009). Many influencers operate in niches – Travel, Lifestyle vlogging, parenting– and for influencers in these categories the motivation for self-presentation is not dissimilar to the motivation of most social media users – to display themselves as well travelled, having a good life or being good parents. But what then for Sex edutainment influencers? It could be argued that their self-presentation is not about demonstrating their life as being enviable, but instead about situating themselves somewhere between 'friend' and 'expert' or 'educator', even though some do not have any formal sexual health training.

The 'conversational character' that helps give influencers their aura of authenticity is also a key element in their perceived accessibility by the audience (Cunningham & Craig, 2017) as not only is their tone conversational, but they invite their audience to comment on videos and like them to be part of the conversation. A demand for accessibility from audiences is a relatively new occurrence which has developed alongside the 'Post-Television' movement of YouTube (Lister et al 2009; Cunningham

²⁴ Meyrowitz (1986) argued that electronic media affect social behaviour due to the removal of boundaries between people and places, and in doing so change the 'situational geography' between people.

& Craig, 2017). What constitutes popular screen entertainment has dramatically shifted for young people. Whilst traditional entertainment media has focused on programmed content from large producers in the form of television and film, today's young people have embraced social media entertainment as an alternative that is "*constituted from intrinsically interactive audience-centricity*" (Cunningham & Craig, 2017: p.72). They highlight that this change is likely due to "*The unparalleled degree of interactivity between creator and fan community*" (p.74) which leads to discourses of authenticity and accessibility. As content creators are subject to a high level of fan and subscriber response and feedback, Cunningham and Craig suggest that audiences are constantly assessing YouTube creators authenticity by testing the level of interactivity provided from the influencer with the digital community they have called into being.

The combination of authenticity and accessibility feed into the development of audience trust in an influencer (Dekavalla, 2020; Marôpo, Jorge & Tomaz, 2020; Santiago, Magueta & Dias, 2020), creating a form of parasocial relationship or parasocial interaction between the media personality (in this case the influencer) and the media user (a social media audience member) (Yuan & Lou, 2020; Sokolova & Kefi, 2020). Horton and Wohl (1956) suggest that parasocial interaction is an "*illusion of face-to-face relationship with a media personality*" (p.215). Whilst Horton and Wohl, were writing long before the creation of social media, social media influencers can be considered akin to the media personalities or celebrities traditionally described by parasocial interaction (Yuan & Lou, 2020; Sokolova & Kefi, 2020).

Understanding how influencers utilise this parasocial interaction and their audience relationships to build trust, and how it translates into audience action (in the form of purchase intention), has been a focal point in recent studies of influencer marketing (Hu, Zhang & Wang, 2019; Scott, 2018; Dekavalla, 2020; Hott Corrêa et al., 2020; Yuan & Lou, 2020; Sokolova & Kefi, 2020). Scott (2018) identifies that although marketing studies have interrogated the way audience trust in influencers can be utilised by brands, little work explores the complex trust relationships between influencer and audience and how these are created and maintained. The strategies influencers employ to enhance trust (Scott, 2018) can also be seen in use by sex edutainment influencers, for instance: sharing personal imperfections and insecurities to disrupt the image of social media as filtered and performed (Hannah Witton, 2018;

Sexplanations, 2020), highlighting their shared values with the audience through advocating causes and charities (Hannah Witton, 2016), and actively discussing taboo topics or creating content that helps fans navigate difficult periods in their own lives (Calum McSwiggan, 2016; Shamsa, 2017).

However, Esch et al., (2018) go a step further in identifying that if audiences perceive similarities between themselves and an influencer, they are more likely to view them as trustworthy. This may be relevant to sex edutainment influencers who share intersectional content related to their lives (e.g., around sex and disability, LGBTQ+ topics, etc), as Abidin (2019) noticed with LGBT influencers that '*vulnerable self-disclosure, peer-led knowledge sharing, and networked friendship is important for marginalized young people.*' (p.617). Furthermore, the work of Hoonsopon and Puriwat (2016) suggests that while consumers used family and friends as private sources of trusted advice, they also used influencers and celebrities as public sources of trusted advice. Although Hoonsopon and Puriwat are applying a marketing perspective, this raises interesting questions about how influencers might fit into young people's lives as a form of trusted public advice, which this research intends to uncover in phase 2 of the research. However, the relationship between influencers and trust is complicated and studies suggest that influencers can also lose this trust if they are seen to be too opportunistic (Scott, 2018), share too many paid adverts (Chapple & Cowrie, 2017), or are perceived as inauthentic (Cunningham & Craig, 2017) therefore they are engaged in a constant process of negotiating audience trust.

This sense of authenticity, same-ness with the audience, and thus trust, may mean that influencers are well positioned to act as alternative peer-educators. Cunningham and Craig (2017) identify that in social media entertainment there is an "*an expectation of peer-to-peer equality and easy access between creator and fan*" (p.77). Unlike traditional media personalities influencers have a near-ness to their audience; encouraging the audience to comment, message and be part of the broader conversation. Even if the influencer does not respond to this outreach there is still the aura of accessibility by the very possibility of communication. If we compare this to RSE programmes in schools this accessibility is unprecedented. In the case of most School RSE programmes the teacher or educator is engaging with the topic for a short period of time, such as a term or sometimes a single lesson, and young people can be

uncomfortable discussing sex with their existing teachers even in RSE lessons (Pound, Langford & Campbell, 2016). In comparison sex edutainment influencers are consistently engaging with this topic and promoting a sense of approachability related to sex and relationships which leads them towards an approachable peer role. More research needs to be done on this topic to understand how and why young people engage with sex edutainment influencers, if at all. There is a lack of empirical studies to identify if influencers can act as peer educators, either in sex education or in broader capacities. This study will address this gap in literature by contributing to the understanding of influencers' potential as peer educators.

3.4.1 Influencers: Qualified to speak?

Cunningham and Craig (2017) have suggested that much of YouTube's success as a platform has been on upskilling previously amateur creators into professionals. Many sex edutainment content creators began this way too, as amateurs sharing a passion for sex-positive information, and though some have formal training, for others popularity has become their qualification. Some would argue that life experience is valuable in this capacity as a form of sharing lived experiences. Gray's (2009) study on rural youth in the USA using coming out videos and stories online to understand their own sexuality shows that, for an audience, formal qualifications are not necessarily required. The youth Gray spoke with used the internet for research to help understand more about their queer desires and their sexuality and found lived-experiences valuable sources of information. Therefore, perhaps we should interrogate the notion of who is 'qualified' to speak and who is not.

McKee (2017) has discussed the importance of recognising the value and skills of entertainment producers and noted opportunities for them to work with educators in reciprocal ways to create sexual health 'edutainment' products. McKee identifies that there can often be tensions, with educators aiming to 'teach' entertainment producers rather than recognising their professional skills and experience in creating well-pitched media products with message. McKee identifies that in order to create equal and reciprocal relationships, public health educators should respect and utilise the knowledge of the media producers they work with who understand the language of the target audience, how young people think about sexual health and how to effectively

'dumb up' sexual health content in order to be engaging and entertaining rather than 'preachy'. Whilst McKee's research centred on magazine-based media producers, the influencers involved in YouTube sex edutainment offer a similar knowledge base in the production of sexual health media content as they are successful media producers, having created parasocial relationships with their audience as they build their following. Therefore, formal qualifications do not always offer a better knowledge than direct life experience and an astute awareness of audience, however influencers arguably have a duty of care to their audiences to ensure they provide factually correct sexual health information.

Accuracy of health information on YouTube has been an active research concern (Pant et al., 2012; Syed-Abdul et al., 2013; Gabarron et al., 2013; Goobie et al., 2019; Loeb et al., 2019; Fode et al., 2020) particularly given the wave of misinformation around COVID-19 that circulated (Li et al., 2020; Knuutila et al., 2020; Brennen et al., 2020; Marchal & Au, 2020). Li et al., (2020) found that 27.5% of the top viewed COVID-19 videos that met their selection criteria²⁵ on YouTube contained misleading information. Knuutila et al (2020) discovered that misinformed YouTube videos about COVID-19 were heavily shared on Facebook (with the most popular being shared 3.15 million times) and that YouTube took an average of 41 days to remove these videos and less than 1% of misinformation videos were labelled by Facebook as misinformation once shared on that platform. Considering these studies, the sharing features that make YouTube a valuable tool may also be a way that misinformation is spread. This shows there is need for critical consideration of who is considered an expert when sharing health information on YouTube and beyond. If influencers do hold a peer educator or health influencer status the quality of their information and how it is fact checked or held to professional standards must be considered, which will be taken into consideration for this study.

²⁵ Selected videos had to be in English, contain audio/visual information, but under 1 hour in length related in COVID-19 and not be a livestream.

3.4.2 Influencers: The role of money

The upskilling of amateur creators into professionals has led many who started YouTube channels or social media accounts as hobbies to develop them into profit-making ventures (Coromina, Matamoros-Fernández & Rieder, 2020). To run a popular YouTube or social media account requires a heavy time commitment for planning, filming and editing videos, engaging with user comments and maintaining a presence online. This time commitment can be challenging to maintain alongside regular employment therefore once an influencer has followers/subscribers in the tens or hundreds of thousands they may welcome the opportunity to use channel monetisation in lieu of full-time employment to pursue their passion which was previously a hobby (Johnston, 2017). As Cunningham and Craig (2017) summarise:

“We understand SME [social media entertainment] to be an emerging proto-industry based on previously amateur creators professionalising and engaging in content innovation and media entrepreneurship across multiple social media platforms to aggregate global fan communities and incubate their own media brands.” (p.71)

As influencers professionalise many of them transition to making content creation a full or part-time job (Abidin, 2017; Johnston, 2017; Cocker & Cronin, 2017). Considering the suitability of YouTube sex edutainment, this may introduce governing forces in the form of advertisers and sponsors. Cunningham & Craig (2017) have observed that social media entertainment content has been shaped by Darwinian style economic selection, as limited advertising revenue options on YouTube and Google Ad Sense have driven creators into non-scalable engagements like brand deals, merchandise, licensing content and cashing in on their popularity in more traditional media contexts. This can already be seen in a YouTube sex edutainment context, with some influencers such as Dr Lindsey Doe selling merchandise (e.g tshirts branded with references from her channel) to fund their channels (Johnston, 2017). This collaboration between influencers and brands could be a space for advertisers to impact content. If sponsorships are available for promoting sex toys, does this impact the content that sex edutainment influencers choose to produce and prioritise towards those that relate to sex toys? If corporate advertisers wish to alter the content and message of a video, are their needs as funders prioritised above the sexual health information needs of

young people? This negotiation between serving audience and advertisers is complex (Abidin & Ots, 2015) and vital to understand, particularly where younger audiences are concerned. Therefore, in this PhD study, the tracing of connections that make up the assemblage of YouTube sex edutainment, will include the generation of data from Sex edutainment influencers themselves to understand the links between the financial implications of content creation. Understanding the role that funding plays for Sex edutainment influencers will aid in assessing the value and challenges of YouTube sex edutainment and play into the recommendations this research develops for professional practice.

Therefore, it is important to remember that although influencers may project an image of authenticity, they are still engaging in forms of 'promotional discourse' (Wernick, 1991) however Cunningham and Craig (2017) argue that this does not reduce their authenticity:

"The critical point here is that brands, by definition, only enter the picture after the establishment of this dialogic relationship between authenticity and community. Brands' interest lies in marketising that established relationship, while creators look to reinforce the brand relationship as a secondary relationship as they negotiate their authenticity status with their community." (p.77)

From the perspective of the influencer, monetisation may not necessarily be about selling an audience in pursuit of money. Yet regardless of good intention this marketising of the trust relationship between influencer and audience raises concerns in relation to young teenage audiences who may be manipulated as consumers of YouTube advertising (Radesky et al., 2020), alongside questions over the ethical nature of advertising to under 18s. Although it is not clear the exact age of YouTube sex edutainment influencers' audiences and what percentage of them are under 18, if younger teenagers are accessing YouTube sex edutainment and encouraged to purchase merchandise or recommended products there may be challenges in where young people obtain the income or pocket money, or if they require parental involvement to participate in these aspects of the fan culture.

One way that an increasing number of influencers are finding ways of monetising their content is through subscription-based crowdfunding digital patronage platforms like OnlyFans or Patreon (Bonifacio & Wohn, 2020). Digital patronage platforms offer

influencers the opportunity to provide additional content for fans willing to pay for access via a monthly subscription cost. Some sex edutainment influencers use Patreon to monetise exclusive content to their audience directly (e.g. podcasts, private online chatrooms for followers, and early access to video content²⁶). This may offer opportunities to step away from advertiser governance, but as some influencers now use this 'premium' level of patronage subscription as the only place to take questions from their audience, this raises complicated questions about processes of belonging, exclusion, privilege, and inaccessibility which create additional complication when considering the potential of YouTube sex edutainment. Whilst influencers position of authority with their audience may be built on authenticity and accessibility, there are potential conflicts of interest in the way the relationship is monetised that need to be weighed against the benefits of their health influence in this study.

3.5 Algorithms

Most of this chapter has focused on YouTube audience, influencers, and the relationship between the two. However, there are additional elements in the exchange between content and consumption in the YouTube sex edutainment assemblage. Whether a user finds an influencer's content at all is often down to hidden processes which sort and categorise both users and content: algorithms. At their most basic, algorithms are rules or sets of instructions which are usually applied to a computer or system to create functionality. Although we may not be aware of them, algorithms are becoming a constant part of our lives (Beer, 2017; Willson, 2017). From a simple addition on a calculator, to providing Netflix recommendations, algorithms are the silent workings allowing our technology to function for and with us. These processes are becoming progressively ingrained in our lives whilst becoming increasingly intuitive through processes such as machine learning and relational databases which allow them to be "*instantly, radically, and invisibly changed*" (Gillespie, 2014; 178). Algorithms are often closely guarded by platforms and websites and many websites go to great lengths, constantly changing and shifting the algorithm, to avoid users being able to 'game' the algorithm in their favour (Petre, Duffy & Hund, 2019). This can make studying algorithms challenging, as Weltevrede (2016) identifies '*digital algorithms are*

²⁶ An example of an RSE influencer using patreon can be seen at: <https://www.patreon.com/hannahwitton>

iterative, continuously changing and are often aggregates of calculations and as such their exact workings at any given time are hard to retrieve' (p.101) therefore we cannot be fully certain how they work.

When considering how YouTube may be utilised for public health communication, such as sex edutainment, with young people, the conversation would be incomplete without assessing the role of the algorithm in this exchange. Although algorithms may seem a small factor, they raises questions around power in online spaces. Beer (2009) argues that although a rhetoric of empowerment and democratisation are commonly touted by platforms, there is a more complex balance of power at play as power structures are now more hidden, they act from within the framework of our software and therefore become more challenging to unmask. Algorithms are portrayed as harmless, impartial, '*objective tools*' and '*legitimate brokers of relevant knowledge*' (Gillespie, 2014; 165), however Gillespie refutes this portrayal as a misconceived 'fiction': Instead Gillespie states, "*evaluations performed by algorithms always depend on inscribed assumptions about what matters, and how what matters can be identified*" (Gillespie, 2014; 177).

This is relevant to sex edutainment, Gillespie notes that YouTube demotes suggestive videos, so they do not appear on the 'most watched' lists or the home page for new viewers. The criteria for how the algorithm ascertains which videos are 'suggestive' is not made public, yet these hidden workings are of vital importance in understanding the potential pitfalls for using the YouTube platform for independent sexual learning. If the algorithm considers videos related to sex, relationships or sexuality suggestive and demotes them this may have real effects on how this content can be found by young people seeking educational information on these topics.

There are growing debates around the consequences of allowing computers to make constant hidden decisions for us, and many of these are integral to understanding the role of algorithms in the dissemination of knowledge. Graham (2004) argued these algorithmic processes are creating new inequalities:

"...digital divides are not just about the usual focus of debate – uneven access to the internet. Perhaps just as important are the powerful and often invisible processes of prioritisation and marginalisation as software and code are used to judge people's worth, eligibility and levels of access to a whole range of essential urban spaces and services." (p.324)

Graham highlights computerised algorithms make silent decisions which group people and effect their user experiences online. This might be pleasing when Netflix 'recommends' a film we enjoy, but Turow (2006) argues that this can lead to 'marketing discrimination'. Turow argues that as computer technologies are increasingly relied upon to generate carefully defined customer categories or 'calculated publics' (Gillespie, 2014) to distinguish customers as desirable or undesirable for their business, these niches can then be used to treat different groups of people differently to maximise profits or reach marketing goals. The concept of 'calculated publics' raises interesting questions about how algorithms may shape us by sorting us. As our information gathering becomes increasingly internet-driven we are often exposed only to what the algorithm deems appropriate to the group it has sorted us into (Lury & Day, 2019). With different groups exposed to different responses to our searches for knowledge this can affect not only what we find but who we become, like an algorithmic self-fulfilling prophecy (Gillespie, 2014; Mittelstadt et al., 2016; Willson, 2017). This is relevant to the use of YouTube for sex edutainment because different young people may be shown different videos, different adverts and may be further sorted because they have viewed sex edutainment videos. This thesis will explore this concern through the use of the walkthrough method, the findings from which are discussed in [chapter 5](#).

When algorithms sort, personalise and shape the content a viewer sees based on homophily, there is the potential for echo chambers to be created (Cinelli et al., 2021; Cohen, 2018) where people are only exposed to those with similar views to their own, as OFCOM (2020) noted that 27% of surveyed social media users rarely saw views they disagreed with on social media. However, Bruns (2019) has challenged the idea of social media echo chambers of being overblown into a moral panic, stating that the problem with homophily and bias on social media is as much a human problem as a technological one. In spite of this, the end of [section 3.6](#) will discuss how the convergence of platform governance around user data and algorithm can lead to concerns around user manipulation.

Beyond this, YouTube is a business, to whom users are consumers therefore we must question if the algorithm is acting in the best interests of fulfilling a users search or

acting in the best interests of YouTube as a business (Beer, 2017). This has been exemplified through arguments surrounding LGBTQ+ content demonetisation and restriction on YouTube. In 2017 YouTube sparked controversy with LGBTQ+ content creators when they noticed content tagged with LGBTQ+ related terms being automatically flagged as restricted and limited from being seen by some users such as those aged 13-18 (Abidin, 2019). For YouTube LGBTQ+ content creators this became an unacceptable form of censorship causing #YouTubelsOverParty to trend on twitter. In response YouTube blamed the algorithm, stating that in the process of machine learning, algorithms make errors: *“Our system sometimes make mistakes in understanding context and nuances when it assesses which videos to make available in Restricted Mode”* and promised they would input the feedback received to *“better train our systems”* (“Restricted mode”, 2017). Although algorithms may be intending to weed out hate speech or harm to users, Noble (2018) has identified in relation to race, algorithms themselves can reinforce oppression. Similar patterns in which algorithmic sorting or prediction led to outcomes which accidentally reinforce seemingly sexist or homophobic thought processes have also been observed (Gillespie, 2014), however, machines learn based on the human patterns they observe. The association between ‘gay’ and ‘explicit’ is not one created by the algorithm but detected from human data and reinforced by the algorithm. Thus, while an algorithm may intend to be neutral, they may at times display back to us uncomfortable truths about wider perceptions in our society.

In 2018 LGBTQ+ content creators again had an issue sharing examples of LGBTQ+ related videos with these being immediately demonetised as ‘not suitable for most advertisers’. Some content creators also shared that YouTube were allowing anti-LGBTQ+ adverts from an organisation named the Alliance for Freedom to play on their demonetised content. This led some affected creators to take legal action against YouTube for discrimination (BBC, 2019a). The issue of demonetisation emphasises the complicated relationship the influencer has between being an educator and being a businessperson who maintains their YouTube account for profit. Were YouTube influencers not in need of financial payment there would be limited effects from issues like the 2018 demonetisation, however these creators are put in a difficult situation of having to decide if they should make profitable content which avoids triggering algorithms or create the content they and their audiences want. Cotter (2019) has

highlighted influencers are often engaged in a 'visibility game', trying to negotiate how to make their content visible to appease social media algorithms, which can impact the content and interactions they have on the platform. Therefore, we must consider how algorithms and monetisation may have power over the creation of content, particularly in the context of sex education where terms related to sex and sexuality may be flagged to be hidden or demonetised.

The examples of YouTube's algorithmic challenges with the LGBTQ+ community demonstrate a lack of 'human discretion' (Graham, 2004; 325). This lack of human discretion is concerning in situations where the algorithm may inadvertently cause harm, especially to youth. Young people value internet resources for their anonymity (Maczewski, 2002; Keipi & Oksanen, 2014; Keipi, 2018) however the unpredictable nature of algorithms could undermine this. Relational databases, which use previous searches to make links to future content and advertising, may inadvertently make inappropriate links. For example, if young people are searching for sex education topics and the algorithm notes sex related terms could it begin to target that young person with sex related products and services it deems relevant for that user, but which may not be age appropriate? Could a teenager using a shared family computer to view sex edutainment videos find their search terms or watch history may trigger algorithmic patterns of 'because you searched for' which could run the risk of exposing that which was intended to be private? These examples are theoretical however, as Beer (2009) references: *"It is important to consider how the activities of content generation and participation of Web 2.0 feed into 'relational databases' and are then used to sort, filter and discriminate in automated ways and without users' knowledge"* (p.998) If not interrogated these may lead to young people being '*outed by the machine*' (Cho, 2018).

These considerations urge us to question who is in control of the flow of knowledge. How algorithms direct users to content may be viewed as the algorithm making decisions about what knowledge is imparted and to whom. In some ways this personalisation may be valuable, but it could be restrictive and limiting. What makes this more challenging is that users are not privy to the knowledge of how or why an algorithm has made those choices or grouped us as it has. Gillespie (2014) Suggests that although algorithms started simply as mathematical procedures applied to data, specifically numbers, we are now subjecting human discourse and knowledge to these

computational logics and that this has political ramifications. He urges sociological studies not to write off algorithms as abstract, technical mechanisms but to critically consider the human and institutional choices that lie behind them. Gillespie's point is valuable, although YouTube use complicated deep-learning algorithms (Covington, Adams & Sargin, 2016) and we might blame the algorithm for how content appears, not only are there human decisions behind that algorithm, but the censorship and governance of what makes it into the algorithm must be considered too. What impact might this have on the use of YouTube as an alternative sexual health learning ecology? Although this highlights that the use of social media platforms like YouTube are not without their challenges, identifying them helps us troubleshoot new policy and practice. For example, if young people may have trouble finding sex edutainment video content because the algorithm makes it lower priority then theoretically this may be avoided by schools or public health organisations providing young people with links to sex edutainment YouTube videos that have been fact checked, or a sexual health organisation may choose to embed YouTube sex edutainment videos on their website so that they can be accessed easily. This research will take all of this into account when interrogating the suitability of YouTube for youth sexual health interventions.

3.6 Platform governance

Whilst Influencers may not have the same rules and limits placed on them as teachers do with curriculums, that does not mean there are not alternative forms of governance quietly informing their work. As Gillespie (2014) suggests, there is a human element behind algorithms and although platforms like YouTube may blame algorithms when mistakes happen, they themselves make choices which affect the algorithm.

YouTube markets itself as a platform from which users can speak and broadcast themselves and their views, yet Gillespie (2010) notes that the semantic choice of the word 'platform' plays into carefully considered business rhetoric:

"The term 'platform' helps reveal how YouTube and others stage themselves for these constituencies [advertisers, policymakers, media producers and publics], allowing them to make a broadly progressive sales pitch while also eliding the tensions inherent in their service: between user-generated and commercially-produced content, between cultivating community and serving up advertising, between intervening in the delivery of content and remaining neutral." (p.348)

Although YouTube is marketed as a participatory platform it is a business, Gillespie (2010) proposes social media providers take advantage of the participatory ethos of the web to utilise the information users volunteer about themselves. Social media platforms do not operate out of social good will; they are for-profit business ventures, and their seemingly free product is often purchased in exchange for targeted user advertising (Papadopoulos et al., 2017). Social media platforms fit an unusual position as users both create the product (user-generated content) and are the product (that advertisers pay to advertise to). If people were not populating the platform with content, it is unlikely anyone would be using it and people using the platform are what attracts advertisers. There is a powerful social pull to encourage young people to join the latest cool social network, in fear of missing out on cultural exchange, friendship making and being socially ostracised (Roberts & David, 2020). Because of this it may be likely that young people will have little care over their data security if it allows them instant access to something they deem socially necessary or unproblematic (Keen, 2020). Arguably, young people, who are vulnerable to advertising, may be further at risk in these spaces because of this. Beer (2009) highlighted that web 2.0 applications are driven by users posting endless information about their everyday lives, emphasising that the repercussions of this have often not been considered: *“We have not yet begun to think through how this personal information might be harvested and used. A starting point would be to find out how this information about everyday mundane lives is being mined, how this feeds into ‘relational databases’, and with what consequences”* (p.997).

Since Beer was writing the ethical and social dilemmas relating to social media platforms use of user data have been brought to the forefront with the Cambridge Analytica scandal (Isaak & Hanna, 2018; Venturini & Rogers, 2019) where Facebook provided data analysis firm Cambridge Analytica with data insights from over 61 million unknowing Facebook users to run targeted advertisements in swing states in the 2016 United States election to influence the outcome. This extreme example identifies that platform governance decisions can have significant consequences. However, there has been a shift in awareness of data protection in online spaces. In 2018 the European Union brought in the General Data Protection Regulation (GDPR); a legislation designed to protect the data privacy of European citizens. The GDPR regulates the way companies, including Social Media platforms, use the personal data

of their customers. Although the United Kingdom left the European Union in 2021, this regulation has been continued with the UK GDPR²⁷, enabling protection of user data to continue. In considering YouTube as a space for sex education with young people it is of ethical urgency to consider how the governance of a platform and their policy may have real consequences on the health and wellbeing of young people. For this reason YouTube must be seen as a key actor in the assemblage of YouTube sex edutainment and will be given equal emphasis in the data collection for this study to understand how its actions impact the young people and influencers involved in YouTube sex edutainment.

3.7 Conducting a systematic review into the potential of social media influencers as health influencers

While there is a wealth of literature relating to the use of social media influencers to influence purchasing decisions from a marketing perspective (Wiedmann, Hennigs & Langner, 2010; De Veirman, Cauberghe & Hudders, 2017; Gross & Wangenheim, 2018; Ki, Cuevas, Chong & Lim, 2020), in the process of researching the literature for this chapter I noted that there appeared to be little scholarship on the use of influencers in sexual health and other health promotion campaigns. Studies of health influencers have often focused on traditional interpersonal and community social influencers such as health professionals, family members and local community influencers however, little appears to be known about how social media influencers impact health.

During the development of this chapter a series of questions formed in my mind around this topic (see [section 3.7.1](#) for these questions), and as there have been no reviews to date to identify the extent of literature around social media influencer's health content, I felt undertaking a review would provide important grounding to support this study.

Noble and Smith (2018) state that *'The purpose of a review of healthcare literature is primarily to summarise the knowledge around a specific question or topic'* (p.39). As section 4.1.1 will discuss, I am not a positivist and thus systematic reviews are not within my usual research toolkit. However, having considered 14 different types of

²⁷ <https://ico.org.uk/for-organisations/guide-to-data-protection/guide-to-the-general-data-protection-regulation-gdpr/>

review (Grant & Booth, 2009), due to having specific questions and wanting a robust and comprehensive search of the potentially limited studies in this area, I chose a systematic review as the most appropriate form of review. Munn, Stern, Aromataris et al., (2018) describe a systematic review as '*a robust, reproducible, structured critical synthesis of existing research.*' (p.1) and note that traditionally systematic reviews have been used to assess the effectiveness of health interventions and relied on quantitative data and meta-analysis. However, there has been a move towards recognising qualitative data and findings within the systematic review process (Pearson, 2004) to recognise that not all questions that researchers and health professionals seek to answer are based on outcomes. The questions that form the focus of this systematic review fall into this category, and as a researcher that values qualitative data, this systematic review will combine studies with a variety of designs and data outputs. The intention of this systematic review is not to replicate a Cochrane review or provide a positivist meta-analysis focused on a limited understanding of valid knowledge as only that which can be quantitatively analysed through randomised control trials. Instead, it seeks to draw together all known knowledge on this topic (Grant & Booth, 2009).

3.7.1 Aim of the systematic review

The systematic review sought to answer the following research questions about social media influencer health content:

RQ1. Is influencer health content factually accurate?

RQ2. What strategies do influencers employ around health messaging?

RQ3. Does influencer health messaging lead to intention of/behaviour change?

RQ4. Do influencers have positive or negative impact on health?

RQ5. What percentage of influencers posting on health topics are trained health professionals?

These questions were developed based on the topics identified through the literature in this chapter, to understand if existing studies around influencers and health could provide answers to these questions.

Given the small niche relating to social media influencer use in sexual health promotion, the decision was taken to review any studies that related to social media influencers and health or health promotion. This is because the insights gained from reviewing these studies could possibly be applied to sexual health and used for the development of this research. For example, understanding if influencers posting about nutrition are posting factually accurate content or if influencers engaged in mental health awareness cause behaviour change gives insights into influencer health promotion cultures, and these insights can be used to illuminate issues or affordances that are relevant to YouTube sex edutainment.

[Appendix I](#) contains the full search strategy, inclusion criteria, the process used to conduct the systematic review and the quality assessment. I have chosen to make this process an appendix rather than a central part of this section because as an interdisciplinary researcher, the quantitative aspects of the process that are often essential for positivist research are not the key focus and I wish to retain focus on the results and insights gained. However, the full review process was conducted systematically and can be read in full in the appendix.

3.7.2 Results of the systematic review

n=1988 studies were retrieved and n=979 duplicates removed. n=1009 studies had abstracts screened, at which point n=873 were excluded. n=136 reports were sought for full text retrieval, n=5 could not be retrieved, n=97 did not meet the core criteria, and n=22 met the initial core criteria but were excluded for not providing data on least 2 of the 5 research questions. This left n=12 studies that were selected for inclusion. These studies had a quality assessment score of between .50% and 0.95% using Standard Quality Assessment Criteria by Kmet, Cook and Lee (2004).

Defining influencers

Although defining influencers was not an initial research question for this review, during the screening process it became apparent that terms around social media influencers in healthcare do not follow any standardised definitions or terms. This made identifying which studies related to influencers and what that meant to each individual research

team challenging. N=52 studies had to be excluded from this systematic review because although they were about ‘influencers’ on social media they provided no definition or details by which their studies could be assessed to meet the criteria for this review. Most of the studies did not give a clear definition of what they considered an influencer to be, this is likely because although the term ‘influencer’ has migrated into popular culture from marketing studies, there is still no definitive theoretical definition of a social media ‘influencer’ or academic framework of levels of influence (Martinez-Lopez et al., 2020; Chopra, Avhad & Jaju, 2021). Of the 12 studies that did meet the criteria, there were discrepancies in how influencers were defined and the range of descriptions used did not necessarily correlate, e.g., Bonnevie et al., (2020) refer to ‘*micro-influencers*’ as having 500 – 10,000 followers, meanwhile Guo et al., (2020) use ‘*micro-influencers*’ to refer to those with 10,000 – 50,000 followers. This demonstrates that academics may be using the same terms to mean wildly different things, and these discrepancies highlight an important gap in literature to create a framework of different forms of influencers that allow researchers a theoretical starting point for health influencer research.

Characteristics of included studies

All the studies (n=12) were published within a three-year period in 2019 (n=2), 2020 (n=6) or 2021 (n=4). The studies represented global views of social media influencers for health with studies based in Indonesia (n=1), China (n=2), USA (n=3), Spain (n=1), The Netherlands (n=1), UK (n=1), Hong Kong (n=1), Germany (n=1), and (n=1) not specifying a geographical location for their study.

In terms of social media platforms, those included were YouTube (n=3), Sina Weibo (n=2), Instagram (n=4), with some studies focusing on a mix of platforms (n=2) or on blogs run by influencers (n=1). The health topics included in the studies were Diet, exercise and weight management (n=5), COVID-19 (n=2), smoking (n=1), suicide prevention (n=1), flu vaccination (n=1) and n=2 studies did not have a specified focus on a specific public health problem. Therefore none focused on sexual health content, nonetheless these studies provide an understanding the use of influencers in health promotion and messaging, making them relevant to this study by providing an

understanding of influencer use in a health context, which can then be used inform this research in the application towards sex edutainment.

The types of studies broadly fell into three categories:

1. '*studies of medical influencers*' (n=3) (Topf & Williams, 2021; Ngai, Singh & Lu, 2020; Zou, Zhang & Tang, 2021) aka those who were trained clinicians who used social media with a large following for public engagement,
2. '*Campaign based affiliations with influencers*' (n=3) (Cheng et al., 2019; Bonnevie et al., 2020; Guo et al., 2020) where existing influencers were recruited to be part of a health campaign with a research team and/or health organisation and the reach/process and outcomes of this were assessed,
3. and '*Influencer content analysis*' (n=5) (Rawatte & Mattacola, 2021; Pilgrim & Bohnet-Joschko, 2019; Sabbagh, Boyland, Hankey & Parrett, 2020; Gil-Quintana, Santoveña-Casal & Riaño, 2021; Sofian, 2020) where existing influencer content and or audience relationship was analysed.

One study (n=1) (Folkvord, Roes & Bevelander, 2020) also used an experimental design to test responses to real influencer content vs a fictional influencer.

It should be noted that due to the small number of studies within this systematic review that results should be considered to be only an early indication. As shown by the dates of the included studies, there is a small but growing body of work in this field and these preliminary findings suggest the need for further research into this intersection between social media, influencers, and health.

To explore the included studies further, the findings are presented below based on each of the research questions posed.

RQ1. Is influencer health content factually accurate?

N=2 of the studies in the systematic review specifically assessed for the factual accuracy of influencer content, however this appeared to be linked to the study design, as we can see by considering the categories the studies fell into in table 1 below:

| Medical influencers <u>(n=3 studies)</u> | Campaign affiliations with influencers <u>(n=3 studies)</u> | General influencer content analysis <u>(n=5 studies)</u> | Experimental design <u>(n=1 study)</u> |
|---|---|--|--|
| Of the (n=3) studies, none (n=0) assessed the factual accuracy of medical influencers content, although one did note: <i>“narrative evidence was used in more than two-thirds of the posts (n=532, 74.6%), while statistical evidence was only used in 16.3% of the posts (n=116).”</i> (Zou, Zhang & Tang, 2021) | All (n=3) studies recruited existing influencers to be part of a health campaign. Influencers were invited to create content around vetted messages and approved facts that had been checked for accuracy by the research team and/or health organisation. Therefore, there were no concerns over accuracy of content expressed by the authors. | Of the (n=5) studies in this category (n=3) were not assessed for accuracy of content, although one of these studies implied an over-reliance on unhealthy food and exercise habits but lacked clarity. (n=2) studies found inaccurate information in influencer health content. | The design of this study did not look at existing influencer health content therefore no assessment of factual accuracy could be part of the design. |

Table 1 - Systematic review findings for influencer health content factual accuracy

It was interesting to note that studies looking at medical influencers who are MD doctors did not check the factual accuracy of the information they provided. However, one study mentioned use of narrative vs statistical evidence. Researchers appeared to have a level of trust that qualified medical doctors would provide credible information, which, although seemingly logical, cannot be assumed. In some cases during the COVID-19 pandemic doctors have been involved in the spread of misinformation, as noted by Milhazes-Cunha and Oliveira (2021) around the ‘Doctors for the truth’ group on Facebook that was found to spread COVID-19 misinformation and conspiracy. Therefore, future studies looking at the influence of medical doctors on social media should also assess the factual accuracy of their posts to ensure it is not assumed that their qualification is an alternative for checking credibility.

Only n=2 of the 12 studies assessed influencer health content for factual accuracy. Both of these studies found misinformation. Sabbagh, Boyland, Hankey and Parrett (2020) found that in recipe blogs posted by social media influencers²⁸ only 8 recipe posts out of the 90 analysed met all their checks for nutritional recommendations, bias, transparency, and resources. The authors also noted that six of the nine social media influencers in their study '*did not distinguish between fact and opinion, providing no, or inadequate, references*' (p.10). In addition, Gil-Quintana, Santoveña-Casal and Riaño (2021), observed some '*dangerous statements or recommendations*' made by Instagram influencers within the realfooding²⁹ movement, and summarised that Instagram posts made by the realfooder influencers were:

'based on fad diets and advertise trendy food or brand-products as the unique form for the assimilation of nutrients which are already present in any healthy diet. Moreover, some posts include narcissistic self-promotion, criticism without scientific evidence and promoting products without a clear nutritional basis.' (p.13)

Whilst it is not possible to make sweeping judgements on the factual accuracy of influencer content based on only two studies, these do highlight that there are concerns about the content being promoted by some influencers around health messaging. However, studies using influencers as part of a campaign with vetted messages (n=3) did not have concerns around accuracy, as these were made in collaboration with researchers and public health organisations who checked the content. These findings suggest that some influencers left to create content alone may be spreading misinformation, but when working with influencers as part of an approved public health campaign with a credible organisation this was alleviated, signifying that collaboration between influencers and public health organisations may be valuable.

²⁸ The authors note that although blogs are themselves not considered social media, influencers often use them to provide more detailed content outside their social media platforms. The blogs selected were all run by health and fitness influencers and thus are social media influencer content, that their followers are linked to.

²⁹ Realfooding is an online movement against ultra-processed food that focuses on a hyper "healthy" view of nutrition.

RQ2. What strategies do influencers employ around health messaging?

N=11 of the 12 studies discussed strategies influencers employed with their audience. The most common strategy employed was encouraging engagement and interactivity with their audience, this was done through answering audience questions, addressing viewers as friends, sharing personal information and emotions, and expressing familiarity with the audience to develop parasocial connections. Ngai et al., (2020) noted that when medical influencers included emotion and affectivity in their posts there was a significant increase in likes and comments from their Sina Weibo audience.

Rawette et al., (2021) noted that influencers cultivated trust from their viewers by sharing their personal lives through daily vlogs (video blogs) where they speak directly to camera, involving the viewer in their activities by asking questions and encouraging engagement, and develop an intimacy with the viewer by telling personal stories about their past and current lives, in relation to the health topic of fitness, and beyond.

The studies where an influencer created content as part of a vetted health campaign noted the importance of allowing influencers the freedom to create their own images and create their own copy around the topic to ensure that they were received as authentic by the audience and fit with their unique voice. Bonnevie et al., (2020) suggested that combining this with an unbranded campaign message led to a form of 'native advertising' that '*matches the message being promoted with the style of content already on the page or individual's social feed where the promoted message will appear*' (p.4) to create more authentic appearing content that may influence the audience to engage. In the two studies related to COVID-19, it was noted that influencers adjusted their content to be relevant to the situation (Sofian, 2020; Topf & Williams, 2021).

Various ways that influencers attempted to establish or maintain credibility were observed. Fitness influencers in Pilgrim et al's (2019) study used rhetorical means to position themselves as experts, posting in ways that made themselves more appealing in the eyes on their followers, and therefore accepted and credible. Meanwhile fitness YouTubers in Rawette et al's (2021) study 'legitimised diet and exercise advice by recounting their own experiences when trying to deal with fitness-related issues and promoted the best solution that they utilised'. In Sofian's (2020) content analysis of

Indonesian YouTube influencers communication around COVID-19, it was noted that 3 of the 5 influencers had used guest contributors in their videos to lend credibility to their content, with one influencer inviting a government advisor on COVID-19 to do a talk show style segment in a video, and another using a medical student to present aspects of the information. However, as noted earlier, only one study noted influencers use of evidence-based sources as part of establishing credibility (Zou, Zhang & Tang, 2021).

RQ3. Does influencer health messaging lead to intention of/behaviour change?

Only n=3 of the 12 studies had specific conditions to test for changes to behavioural intention or change, however seven other studies did have discussion relevant to this question. Therefore, whilst discussion around the potential of influencer health content to change health behaviours was common, there is a low evidence base for if influencer health interventions have an impact on behaviour. Two of the three studies that tested for behaviour change were the studies where an influencer worked on a vetted campaign (Cheng et al., 2020; Bonnevie et al., 2020), these studies provided detailed analysis of behavioural intention and knowledge impacts on the audience, the third study (Folkvord, Roes & Bevelander, 2020) used an experimental design where participants who followed a real fitness influencer were shown posts by the real or a fictitious influencer and answered questions to understand their purchase intention based on the posts they saw. The study found that the parasocial interaction between the real fitness influencer and audience led to an increase of purchase intention for the health food product they promoted compared to the fictitious influencer. However, this study had a limited sample size (n=154) and did not consider actual consumption, thus although the findings appear positive, further research is required.

The two vetted campaign studies provide a clearer picture. Bonnevie, et al.,(2020) used influencers to encourage hard to reach populations to get the flu vaccine tracked behavioural intention and change in a number of ways, including seeing how many people followed the campaign materials to find their local vaccination centre and knowledge and attitude change. They found '*a greater improvement in knowledge and positive perceptions of the flu vaccine among respondents sampled from the campaign area versus those in the control area in the post- campaign follow-up survey*' (p.8-9)

with significantly higher agreement with pro-vaccine social norms, and that at follow-up *'those in the campaign area who reported exposure to campaign posts were significantly more likely to have received the flu vaccine and report positive flu vaccine perceptions than those who did not report exposure to campaign posts'* (p.9).

Meanwhile, Cheng et al., 2020's influencer campaign for suicide prevention noticed perceived changes in knowledge and attitude were greater than changes in behaviour. They noted survey respondents with suicidal thoughts who had watched the influencer video perceived *'a significantly lower magnitude of change to open up to people around them when feeling down or having suicidal thoughts [...] than the nonsuicidal group did'*. Illustrating that the campaign was not fully successful in creating behaviour change, however n=2 suicidal survey respondents suggested that the film had helped them or given them motivation to live, and two commenters on the YouTube video with suicidal intent had *'dispelled their suicide plans after watching the short film'*.

These findings point towards positive effects on behavioural intention when influencers are involved in health promotion. However, these results should be considered preliminary as further research is required across a range of research designs to understand broader impacts of influencer health messaging on public behaviours. Due to the large number of vaccination campaigns being run around the world for COVID-19 vaccinations, it may be that further research on this topic is currently in development.

RQ4. Do influencers have positive or negative impact on health?

The studies interpretation of whether influencers had a positive or negative impact on health appeared directly correlated with the study design or health topic. All three studies designed around a vetted campaign (Cheng et al., 2020; Bonnevie et al., 2020; Guo et al., 2020) drew positive conclusions on influencers impact on health. Folkvord, Roes & Bevelander's (2020) experimental study of influencer para-social interaction on purchase intention of healthy foods also concluded that the indications were positive, as did Sofian's (2020) analysis of Indonesian influencers sharing of COVID-19 messaging. Meanwhile all of the studies that noted negative impact on health (n=4) were content analysis studies of existing influencer content related to diet, exercise

and weight management (Rawatte & Mattacola, 2021; Pilgrim & Bohnet-Joschko, 2019; Sabbagh, Boyland, Hankey & Parrett, 2020; Gil-Quintana, Santoveña-Casal & Riaño, 2021).

Due to this there are some interesting questions to be raised for further research, specifically if public health organisations can work with influencers to create positive outcomes not only in behaviour but improving factual accuracy of social media health content shared with large audiences. Some health topics such as diet, exercise and weight management may require additional focus due to the higher levels of misinformation and negative impact to health noted around them, however this may also be skewed because this was the most popular health topic across the studies in this review, further research into other health topics on social media may identify the same negative findings in other areas. Four studies (n=4) did not make specific conclusions or statements related to whether influencers had a positive or negative impact on health (Sofian, 2020; Topf & Williams, 2021; Ngai, Singh & Lu, 2020; Zou, Zhang & Tang, 2021).

RQ5. What percentage of influencers posting on health topics are trained health professionals?

N=4 studies did not specifically assess if influencers were qualified on the health topic they posted on, however in all four of them the influencers do not appear to have any qualifications based on the analysis presented in the study (Rawatte & Mattacola, 2021; Pilgrim & Bohnet-Joschko, 2019; Gil-Quintana, Santoveña-Casal & Riaño, 2021; Folkvard & Roes & Bevelander, 2020). Three studies (n=3) focused on qualified clinician influencers, therefore those studies only looked at qualified medical doctors (Topf & Williams, 2021; Ngai, Singh & Lu, 2020; Zou, Zhang & Tang, 2021). Three studies had influencers who were not trained health professionals but worked on campaigns with trained health professionals to ensure content accuracy (Cheng et al., 2020; Bonnevie et al., 2020; Guo et al., 2020). Finally, (n=1) study noted that while none of the 5 influencers in their study were trained health professionals, 3 of the 5 influencers utilised guest appearances by qualified individuals to talk about COVID-19 to provide credibility (Sofian, 2020), and one (n=1) study noted that only 2 of the 9

weight management bloggers in their study were qualified to provide weight management advice (Sabbagh, Boyland, Hankey & Parrett, 2020).

3.7.3 Implications of the systematic review on this research

Although the screening process for this systematic review had no date criteria, the 12 studies that met the criteria and answered the research questions were all published between 2019 - 2021. This indicates that interest in influencers impact in the field of health is an emerging and growing field. Given the role of social media in the COVID-19 pandemic, it is likely further research will emerge around social media influencers and public health messaging. None of the studies that met the criteria for this review related to sexual health, however the systematic review highlighted some useful findings about social media influencers' role in health education that can be applied to this study. Therefore, this thesis will contribute to this small but growing field of study by being, to the authors knowledge, the first detailed empirical study of social media influencers in sexual health.

Despite the small scale of this review, several findings emerged. Firstly, within the field of health research there is no clear definition of an influencer, the terms used, quantifiable number, and descriptors of influencers are wide ranging. This made the screening process for conducting this review challenging. Even within marketing studies, where influencer research is prevalent, there is ambiguity over the term and what constitutes an influencer (Martinez-Lopez et al., 2020; Chopra, Avhad & Jaju, 2021). Therefore, this suggests there is value in the creation of a framework of influence to help provide a way of understanding the role of influencers within health communication to be used as a starting point for researchers. This would be of use in health research where 'influencers' can be anyone who wields health influence. This thesis will contribute to this field of knowledge by developing this framework ([see chapter 6](#)).

The studies in this review the techniques influencers use to build audience relationships and create health influence. The key factors identified were the use of interactivity and the encouragement of creating a para-social relationship between the influencer and audience member to create trust and perceived credibility. However,

further research is needed to interrogate the impacts of influencer health interventions on behavioural intention of their audiences as the evidence presented in these studies does not provide enough detail to assess the impact of these interventions. Whilst this thesis will not directly look at behavioural intention or behaviour change, it will provide opportunities to understand the influencer-audience relationship and what impacts the trust relationships between these actors.

There is concern about the spread of health misinformation on social media by unqualified lay people, social media influencers and their networks. This review has identified that some influencers health information is inaccurate, may promote unhealthy habits, and influencers may lack professional qualification on the topics they post about (Pilgrim & Bohnet-Joschko, 2019; Gil-Quintana, Santoveña-Casal & Riaño, 2021). However, in terms of training, factual accuracy and impact on health, campaigns where influencers worked with public health organisations on a vetted campaign had the most positive effects (Cheng et al., 2020; Bonnevie et al., 2020; Guo et al., 2020). These campaigns are more able to measure impact, while also ensuring health information shared is accurate. Although influencers may not be trained health professionals it gives opportunity for them to work with health professionals to give their content credibility. Public health organisations should look for ways to engage more with influencers for the greater public good, utilising them as an information dissemination resource. However, what some audience members may be seeking in social media health content is not just information, but the lived experience influencers may provide, therefore the balance between public health messaging and content creator freedoms may need to be considered. For this reason, further research is required to understand health information seeking behaviour, what sort of information is being sought where, and the perceived benefits and risks of this information, which this thesis will address.

3.8 Conclusion

The previous chapter emphasised the history of RSE, gaps in provision for young people's sexual health information needs and the potential for YouTube sex edutainment content may offer to fill those gaps. This chapter has furthered the understanding of YouTube sex edutainment by considering the role of YouTube in learning ecologies, how influencers may fulfil a peer educator or health influencer role and, interrogated some of the more complex challenges that YouTube may present if it is to be used as an independent sexual health learning resource for 13-24-year-olds in the United Kingdom. These challenges are not necessarily a reason to dismiss YouTube or other social media for this purpose, however they offer important factors to be interrogated when exploring the use of social media interventions with vulnerable populations such as minors. These considerations will be brought forward into the design of this research in evaluating the appropriateness of YouTube for sexual health learning.

Finally, this chapter shared the findings of a systematic review conducted into social media influencers use for health promotion and found mixed results. Whilst there were concerns about content created by influencers spreading misinformation, campaigns that teamed influencers with public health or research organisations offered opportunities to use influencers existing reputation and influence with their audience whilst also ensuring that content was factual and relevant to the campaign. This suggests that including public health organisations as an additional actor within influencer health content could have positive benefits.

Drawing this together, returning to our diagram of the assemblage of connections around YouTube sex edutainment, we can see the three key actors are influenced by a number of elements that have been discussed in literature.

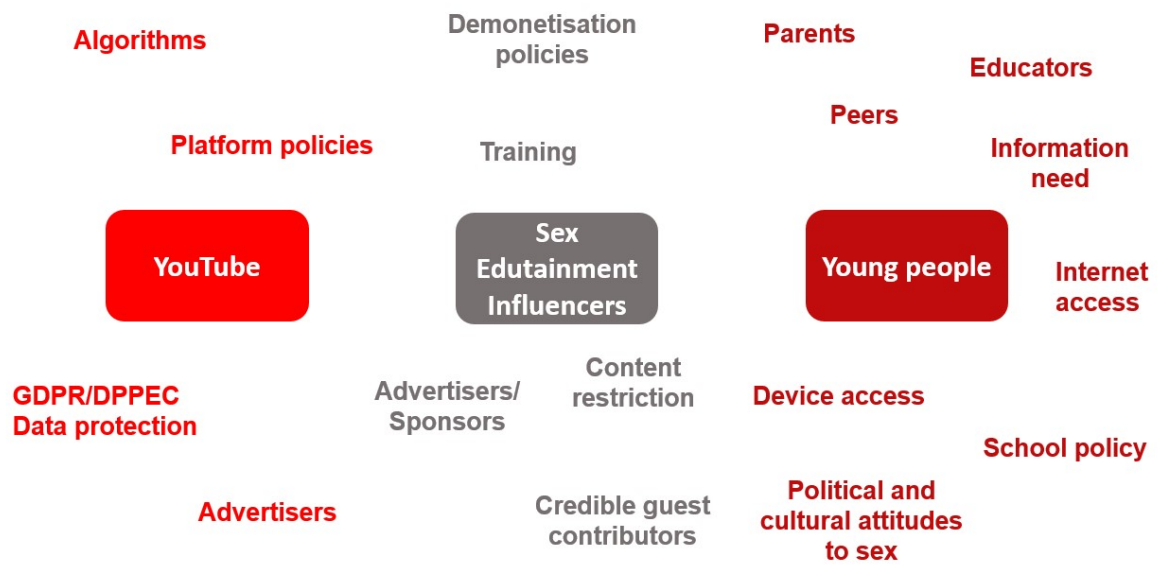


Figure 7 – ANT literature web stage 2

This diagram of key actors and the additional elements behind them will be carried forward into the next chapter to create an informed research design. The next chapter will begin by identifying key methodological positions that have underpinned the practical decisions for this research, before addressing the design, data collection and analysis of this study.

Chapter 4 – Methodology and Methods

4.0 Introduction

Having explored the literature surrounding young people's RSE, YouTube, influencers and their intersections in the previous chapters, this chapter will lay down the methodological viewpoint and theory underpinning this research, and the methods used to conduct the study. This chapter will begin by laying out my ontological and epistemological position, exploring the theoretical lens of Actor-Network Theory (ANT) and its selection for this study, and why, because of this, digital methods were chosen as the most appropriate form of data collection. Following on from this, the chapter will identify the research design inspired by this theoretical underpinning, and the methods used for the three-phase research design and analysis. Before ending with a short discussion on how conducting research in the global COVID-19 pandemic affected the research process.

4.1 Methodology

This section identifies the methodology that underpins this research, which helps to identify the foundation upon which the research decisions were made.

4.1.1 Ontological and Epistemological positioning

Before discussing the methodological approach for this study, it is important to clarify my ontological and epistemological position and how it impacts the design of this study. Guba and Lincoln (1994) suggest research paradigms are '*basic belief systems*'. These belief systems are built on how we understand the nature of reality, or ontology, and the nature of knowledge, or epistemology; and given our understandings of these how we would go about finding out what we believe can be known methodologically. The paradigm selected for this research is interpretivism (Kivunja & Kuyini, 2017) and the following paragraphs will identify how this was selected due to my ontological and epistemological belief systems.

Given my academic background in sociology and cultural studies I have been trained to see the social influence in everything around me. Thus, I believe even purportedly

rigid concepts such as time and gender are social constructs to help us organise and make sense of the world around us. Therefore, I approach research with a relativist ontological position (Kivunja & Kuyini, 2017), recognising that each individual's reality is inherently subjective based on their experience of the world as perceived through their own intersectional lens of gender, race, class, sexuality, culture, experience, and life events.

The young people in this study are not a homogenous group, their access to RSE may be different, their familial, cultural, or religious views may impact their opinion on relationships and sex, and the information they receive on this topic may be impacted by these as well as their parents, friends, how well trained their teachers are, their access to the internet and devices, amongst other determinants. The same can be said of sex edutainment influencers; their positions are also intersectional as some create content related to sex and disability or LGBT sex, based on their subjectivities. Humans do not have a singular objective experience of the world (Rehman & Alharthi, 2016) thus the individual perceptions of those who choose to participate in the social phenomenon of YouTube sex edutainment, or not, are of great interest to me as a researcher, in understanding the potential of this social media resource for future development.

However, if there is no single objective reality, epistemologically there can be no one singular knowable truth for a researcher to uncover (Rehman & Alharthi, 2016). Whilst a positivist epistemology views only scientifically verifiable scientific facts as legitimate knowledge (Crotty, 1998), I position myself from an interpretivist standpoint, recognising that not only are truth and knowledge culturally and historically situated, and subjectively based on individuals' experiences (Ryan, 2018), but that epistemologically a researcher cannot exclude their own subjectivities from the knowledge creation process (Blaikie, 2000; Grix, 2004). Although the researcher analyses and interprets data, no matter how unbiased they attempt to be, they cannot rid themselves of their own subjectivities that may impact which patterns and observations jump out at them from the data.

In academia we can be drawn towards 'clean' studies where there is a clear and scientific knowledge outcome, with easily measurable quantitative data. However, whilst this can give us a snapshot of a phenomenon – for example identifying what

percentage of young people do or do not engage with YouTube sex edutainment – it does not tell us *why*. For this reason, whilst some quantitative data forms a part of this study, it focuses predominantly on qualitative data to capture the voices and motives of those who are, or are not, engaging with social media as part of their sexual health learning. Interpretivism and qualitative data provide an opportunity to understand the potentially messy data that comes from social research into polarising topics like sex education, social media and influencers. Social research in complicated or controversial topics is not necessarily linear, therefore this research does not expect to provide scientific yes or no responses or clear-cut answers to hypotheses, instead providing indications and insight around the research topic. However, an interpretivist methodology that embraces qualitative inquiry can help in understanding the social and personal motivations behind sex and relationships information seeking and social media usage. This in turn offers opportunities to understand the human experience behind messy data and find patterns and themes that shed light on the researched phenomenon. As Rehman & Alharthi (2016) summarise '*The goal of interpretive research is not to discover universal, context and value free knowledge and truth but to try to understand the interpretations of individuals about the social phenomena they interact with*' (p.55).

This ontological and epistemological stance has a strong impact on the conception, design, and process of this study. Unlike positivist studies that may examine RSE interventions with a focus on objective outcomes such as their impact on condom use, knowledge increase, and STI reduction, this study takes an alternative view that those health outcomes are often impacted by a range of social factors beyond the intervention itself (Denscombe, 2001; Kloep et al., 2001; Shucksmith, 2004; Wight & Henderson 2004; Abel & Fitzgerald, 2006). Therefore, we cannot take an intervention at face value without exploring and understanding the social connections that underpin them.

4.1.2 A note on Sexual and Reproductive Health Rights

As touched on in section [2.2.1](#), Sexual and Reproductive Health Rights (SRHR) is the application of human rights to access information around relationships, sex, and sexual health (Berglas, Constantine & Ozer, 2014). The concept of SRHR were born out of the United Nations at the International Conference on Population and Development in 1994 (Chandra-Mouli et al., 2015; United Nations, 1995) who defined reproductive health as “*a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes*” and called for “*meeting the educational and service needs of adolescents to enable them to deal in a positive and responsible way with their sexuality*” (p.S1).

Since then, a number of scholars have focused on the SRHR of young people through the access to comprehensive and positive sex education interventions (Waldman & Amazon-Brown, 2017; van Heijningen & van Clief, 2017; Herbst, 2017) and primary care sexual health services (Sieving et al., 2019, 2020; Smith et al., 2018). However, despite this Chandra-Mouli et al., noted in 2015 that 20 years after the 1994 International Conference on Population and Development, SRHR had a long way to go, summarising; ‘*The many knowledge gaps, however, point to the pressing need for further research on how to best design effective adolescent SRH intervention packages and how best to deliver them*’ (p.S1).

This research is rooted in the SRHR perspective that youth have a right to sex education which empowers them to have mentally and physically healthy sexual and emotional relationships and relationships with themselves and their bodies. The inception of this research project was born from my interest in how sex education could become more relevant to young people, due to the belief that young people are entitled to the knowledge that will allow them to make healthy, informed decisions on their journey to becoming fully autonomous, sexually-fulfilled adults.

Although this study does not consider itself a SRHR study³⁰, the concepts of SRHR have been applied to parts of the research design, primarily in that this study chose to collect data from young people, rather than focusing on parents and educators, and retains a view that sex education should serve the information needs of young people rather than being censored by the discomfort some parents, educators and school governing bodies feel around narratives of sex and pleasure. This was then furthered in choices to allow child-consent, which can be read about in [4.5.5](#).

4.1.3 Actor-Network Theory

As outlined in [section 1.6](#), to develop an understanding of YouTube sex edutainment and the social connections underpinning it, Actor-Network Theory (ANT) was selected as a theoretical lens for the research to situate YouTube sex edutainment within the social structures that surround it. ANT was deemed relevant for this research as it recognises not only the human impacts on social interactions, but the technological non-human influences that also shape and impact human interactions, whilst being reciprocally shaped by humans (Latour, 2005). This perspective is appropriate when considering how YouTube, a technological social media platform, assembles with human actors (Sex edutainment influencers and young people) in YouTube sex edutainment.

ANT originates from Science and Technology Studies, within a family of theory that considers the social shaping of technology (Light, 2014). This body of theory centres on the notion that “*society has the potential to shape technology and that technology has the potential to shape society*” (Light, 2014; p.29). ANT was developed predominantly through the work of Latour (1987, 2005), Callon (1989), Law (1992) and Akrich (1991, 1997) and treats everything in the social and natural world as part of a web of relations that continually, reciprocally shape one another. Latour rallied against assumptions made in sociology around ‘the social’ that assume that social forces exist in and of themselves and can be used to explain social phenomena (2005). Therefore, at its heart ANT is a material-semiotic method that

³⁰ It is the researcher’s opinion that had this study been designed specifically as a SRHR study that it would have included youth participation in the design and development of the study itself, as active co-designers of the research process. However, as this study seeks to provide a foundational interrogation of the possibilities and problems of YouTube sex edutainment, these methods were decided against. Therefore, whilst SRHR concepts underlie this research and the researcher’s decisions, the researcher does not feel this study constitutes a SRHR study.

maps the connections between both things and concepts, making possible the tracing of connections that make up a 'social' experience, interrogating the 'assemblages' of social phenomena rather than leaving them assumed. Latour (2005) argues that where some sociologists start with a pre-defined group to study, that ANT scholars should start with the network around a phenomenon and observe the connections from there, to avoid falling into assumptions before observing³¹. Thus, ANT social scholars, rather than attempting to pre-empt or explain social activity, focus in on the web of connections surrounding the social phenomenon they are studying, and observe and describe the connections that create the assemblage. This can be seen in the approach taken throughout this thesis in the mapping and building of connections from chapter to chapter to develop the understanding of YouTube sex edutainment.

As described in the introduction to this thesis, ANT observes each of the entities in the web of connections as actors, and these can be both human and non-human. Prout (1996) defines an actor as a: "*source of an action regardless of its status as a human or non-human*" (p.201). Thus, in this research YouTube is an actor, as despite being a non-human entity, it is the source of an action, likewise the algorithms working silently within the platform that influence actions and impacts YouTube users take on the role of actor within the extended assemblage, as much as the young person searching for information or the influencer creating content.

As we can observe by our mapping from literature in the previous two chapters, there are many human and non-human sub-actor or elements surrounding the three central actors to this study (YouTube, Influencers, and young people) in the assemblage of YouTube sex edutainment. Moving on from the literature, later in this thesis, ANT is used to develop a further mapping of connections from the data (Chapters 5, 6 and 7).

³¹ Latour's suggestion holds correct for this research, as the researcher initially held an assumptive view that this research should centre around 13 – 18-year-olds, however, tracing the connections in the literature and data led to the expansion of this to include 19 – 24-year-olds, as will be discussed later in this chapter ([section 4.5.1](#)).

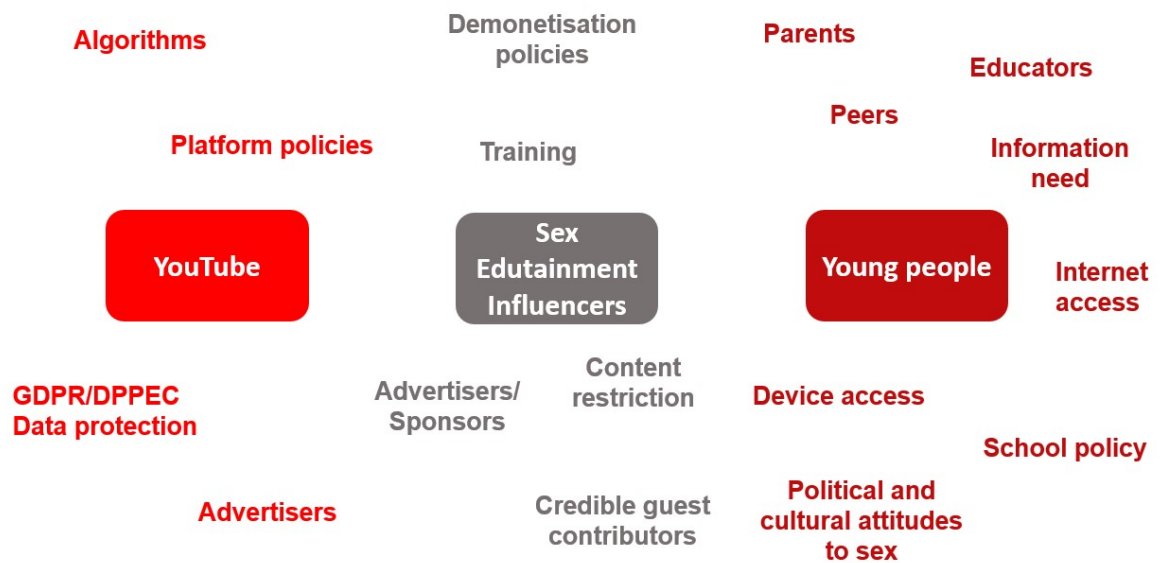


Figure 7 – ANT literature web stage 2

However, ANT is not without its criticisms (Sismondo, 2004; Winner, 1993; Amsterdamska, 1990; Shapin, 1994). For instance, Sismondo (2004) highlights that in focusing on the specific individual actors in a network alone, ANT is a ‘culturally flat’ theory, aka, it does not consider the impact of larger cultural networks on an assemblage as they do not fit neatly into an ANT framework. This is why time has been taken in the literature review of this thesis to acknowledge the historico-cultural background that surrounds sex education ([see section 2.1](#)), so that the tracing of social connections around YouTube sex edutainment are not assumed to operate in a vacuum of socio-political context.

Sismondo (2004) and Winner (1993) also highlight some deeper philosophical questions related to the debates surrounding the realism of non-human actors, how agency is distributed amongst human and non-human actors and whose stories are selected to be traced using ANT. However, Law (1999, 2016) has defended the complexity of ANT, suggesting that tensions should be grappled with, rather than wished away, as he argues against fixity and singularity when understanding ANT, and instead embracing the heterogeneous diaspora of work that falls under its umbrella. For the purposes of this research, ANT can be viewed as a tool that encourages the researcher to look deeper at the interactions that make up a phenomenon, taking into

consideration both the human and technological elements that influence the social dynamics created.

4.1.4 Digital methods and online Research

There are two types of methods that might be considered 'digital'; those that digitalise long-used research methods (e.g., email interviews, online surveys) and those that are born from digital media to study the digital by mining existing internet data (e.g., data produced by social media, forums, blogs or internet web pages) (Jones, 1999; Rogers, 2015, 2019). This research utilises both. This section will identify the arguments around using social media data and justify why combining this with digitalised variants of traditional research methods was selected as most appropriate.

The internet is valuable not only for studying online communities *'but as a source for studying modern life that is now suffused by data'* (Ford, 2016). Using digital methods to study YouTube presents opportunities not only to understand the online communities that congregate around YouTube sex edutainment content, but to study how other aspects of life such as learning, sexual health and information sharing intersect with the YouTube platform. In selecting digital methods there is *'an on-going process of assembling, re-configuring, and aligning research questions with digital media and device cultures'* (Weltevrede, 2016; p.178) to ensure that digital methods are appropriate to the study. Digital methods should not be treated as a novelty or an easy way to obtain large datasets. Used well they provide ways to study existing social phenomena online. Venturini et al., (2018) suggest digital methods are not suitable for all research scenarios but are best suited where the research phenomenon is performed or reflected in internet platforms (e.g., in this study the phenomenon performed on an internet platform is YouTube sex edutainment). This allows the study of the *'primary traces'*, of the phenomenon being studied (Venturini et al., 2018; p.4198). Digital methods are therefore suited to this study as they can be used to observe YouTube sex edutainment in its online environment and trace the connections created between the actors from the online sources where they meet.

However digital methods utilising big data come with their own unique challenges, particularly those surrounding ethics of data use and consent ([see section 4.4.7](#)). Also,

there is the opportunity to be overwhelmed by data, or to assume that big data is a sole and complete view of a picture, as Lohmeier (2014) states '*The challenge then becomes to relate different pieces of data, trace and confirm patterns and make sense of what was found in the larger scheme of things.*'(p.78) Additionally, Ford (2016) highlights that big data research can be impersonal, although combining it with other data sources can bring back the people-centric nature of research. For example, Dubois and Ford (2015) used visualisations from social media data and took these back to participants for them to give a human voice to the data created about them and Duguay (2017) combined digital methods with interviews to give contextual depth to the digital data in her study. The design of this YouTube sex edutainment study also utilises this mixing of data sources, using email interviews with influencers and online surveys with young people to make the research more 'people-centric' (Ford, 2016), and provide deeper understanding of the way the connections play out beyond the immediate social media sphere in which they occur. Although I believe online environments can be people-centric, this combining of methods allows the capturing of '*online and offline life and their intersections*' (Lohmeier, 2014; p.86) and a deeper exploration of participant voices to understand if and how the target audience of this research use these resources, as well as unearthing additional perspectives from those creating them.

The other form of 'digital' methods, those that digitalise traditional research methods, have also become an essential part of research due to the impacts of the COVID-19 pandemic (Kara & Khoo, 2020a, 2020b, 2020c, 2021). Although the research design for this study always intended to utilise online data collection, as data collection was conducted during the COVID-19 pandemic, online data collection became a necessity for research to continue throughout national lockdowns and school closures in the UK. Further discussion on the impacts of COVID-19 on this study and how it emphasised the importance of digital research can be found in [section 4.6](#).

Finally, the selection of these methods also contributes to the originality of this research, as although there is now a growing wealth of academic literature around digital sex education (McKee et al., 2018; Herbst, 2017; Waldman & Amazon-Brown, 2017; Arnab et al., 2013; Bailey et al., 2015) the research methods for these studies often still centre around traditional face-to-face data collection. Therefore, this research

aims to synthesise the understanding of YouTube sex edutainment through the utilisation of digital methods, with digitalised traditional research methods to ensure the research remains people centric.

4.1.5 Tensions of interdisciplinary research

Interdisciplinary research is ‘*a mode of research by teams or individuals that integrates (1) perspectives/concepts/theories, or (2) tools/techniques, and/or (3) information/data from two or more bodies of specialized knowledge or research practice.*’ (Porter, Roessner, Cohen, & Perreault, 2006; p.189). This thesis and research study is interdisciplinary by nature, sitting across a number of academic disciplines, particularly public health, media studies, cultural studies, and education.

While interdisciplinary research is increasingly encouraged within academia, there are still tensions for interdisciplinary scholars (Biancani et al., 2018; Lyall, Bruce, Tait & Meagher, 2015; van Teijlingen et al., 2019). Woiwode and Froese (2021) highlight that, despite best intentions, scholars are often ‘disciplined’ by their training and academic organisations, funding opportunities, and peer-review processes that tend to favour monodisciplinary research. This can lead to challenges for interdisciplinary research, as disciplines have different ways of working, semiotic conventions, and publishing guidelines that researchers must negotiate between (Van Teijlingen et al., 2019).

Much of the literature around challenges in interdisciplinary research focuses on tensions experienced by researchers in different disciplines coming together for interdisciplinary projects (Biancani et al., 2018; Lyall, Bruce, Tait & Meagher, 2015; Woiwode and Froese, 2021), however there are additional challenges for new researchers emerging as interdisciplinary researchers. For example, as Holley (2015) notes, the structure and culture of colleges and universities is steeped in disciplinary history, and this history is apparent within the processes of completing a doctoral degree:

‘The doctoral degree is considered to be a reflection of a disciplinary identity. The university functions with such identities as its cornerstone, structuring learning experiences, faculty employment, departmental organisation and fiscal allocations around disciplinary boundaries.’ (p.642)

This raises methodological challenges as, discussing the challenges of interdisciplinary research in public health, Van Teijlingen et al., (2019) recognise that interdisciplinary researchers require a strong foundation of disciplined knowledge, however they also state: '*We need to consider how we will train (at least some) truly interdisciplinary Ph.D. students to help us deal with the complex questions of the 21st century*' (p.6). My experience conducting this research has been shaped by this need to navigate disciplinary knowledge and convention, with tensions in trying to undertake a truly interdisciplinary PhD. For example, at times the supervisory team have been in disagreement around this thesis due to differing expectations within their fields. Whilst it might have been easier to align with one discipline, instead a process of selecting elements from each field that best served the research objectives, developed the understandings of this study and challenged me to expand beyond the comfort of my previous research experience was used.

This can be a challenging negotiation, as different disciplines can clash in their methodological intentions. What to one discipline is necessary rigour required for 'proof', to another is unnecessary limitation that ignores the subjective nature of reality and knowledge. I have made clear the interpretivist paradigm used in the selection of this research. This paradigm has been used to navigate through the interdisciplinary terrain, whilst still recognising that value can be located in some conventions of public health scholarship that have traditionally been rooted in positivism but can be utilised to compliment this paradigm and the development of this research, such as the use of a systematic review.

Yet, the treading of the 'unknown territory' of interdisciplinary approach also has valuable benefits (Lyll, Bruce, Tait & Meagher, 2015). Christensen, Ekelund, Melin and Widén (2021) call interdisciplinary research a 'beautiful risk' stating that the risks of branching outside of traditional disciplines can contribute to '*more holistic, sustainable and socially robust learning in research and higher education*' (p.1). Meanwhile Conole, Scanlon, Mundin and Farrow (2010) suggest that interdisciplinary research encourages lateral thinking and '*helps broaden a researcher's literature base and may give rise to fresh theoretical insights*' (p.7). These benefits suggest that thinking beyond the boundaries of disciplines can create opportunities for innovation and new ways of problem solving.

In addition, an interdisciplinary approach is also necessary in achieving the aims of this research. Research objective 3 seeks *'to understand the views and role of Sex edutainment influencers and how partnerships could be developed with them'* and developing partnerships with influencers will revolve around the ways charities, organisations and educational departments can work with influencers. Thus, although I approach this research from an interpretivist standpoint, it is important to recognise that the systems that surround the charities, governmental departments, policy makers and educational organisations that make choices about sex education funding, programming and resources often function on figures, facts, and outcome-based evidence (Oliver & de Vocht, 2017; Brownson, Fielding & Maylahn, 2009; Golden & Wendel, 2020). These are more commonly associated with positivist or scientific research processes as many conventions of public health research are based on the positivist traditions that underlie health and medical research (Jack, 2006; Golden & Wendel, 2020). This thesis therefore needs to reach across these boundaries and provide knowledge and information that can cross between disciplines for maximum impact. This will be achieved by the mixing of disciplinary conventions and outputs to create an interdisciplinary research project that can hopefully be utilised by organisations, researchers, and the key actors this research centres on alike, regardless of their disciplinary backgrounds or needs.

4.2 Methods

There are a multitude of valid methods which could have been utilised for a study of this type, and a number of variations were considered in the development of the research. However, the methods selected represent those that I identified as the best to explore and trace the connections surrounding YouTube sex edutainment. The remainder of this chapter lays out the methods selected in this study to achieve the research aim and objectives, explaining the approaches to research design, data collection and analysis.

This research is based on a three-phase study design, with each phase focused on one of the key actors in the YouTube sex edutainment assemblage. To develop the research design, the research aim was split into six objectives to provide a deep understanding of the possibilities and problems of YouTube sex edutainment. Five data collection methods were selected to achieve these objectives, and these were

then divided into three phases, each focused on one of the key actors in the YouTube sex edutainment assemblage (YouTube, influencers and young people):

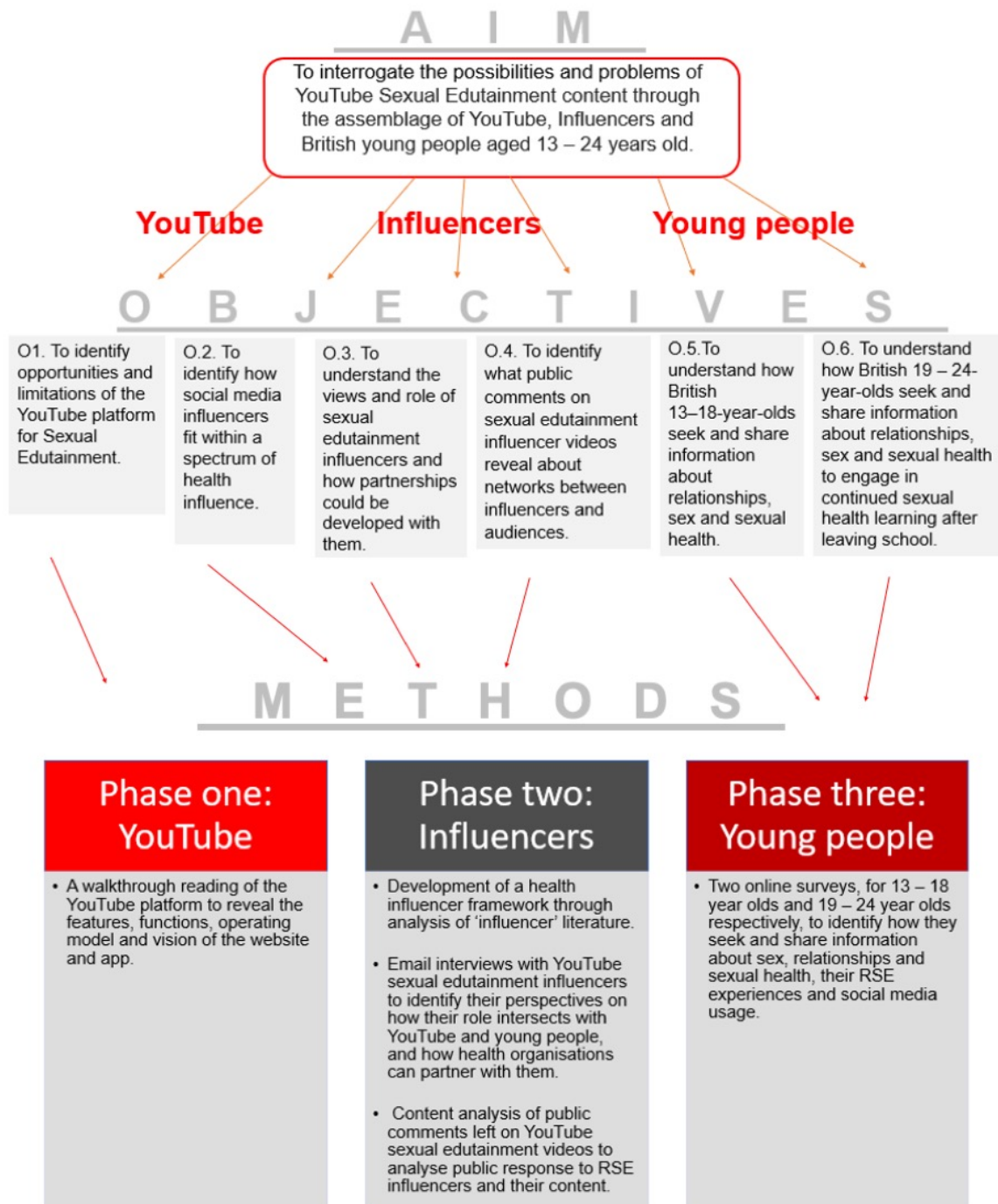


Figure 8 - Research design

Phase one ([see section 4.3](#)) focuses on understanding YouTube by assessing the constraints and affordances of the platform using the walkthrough method. Phase two ([see section 4.4](#)) uses the creation of a health influencer framework, alongside influencer email interviews and content analysis of audience comments on YouTube sex edutainment influencer videos to understand influencers and their relationship to their audience. Meanwhile, phase three ([see section 4.5](#)) provides valuable people-centric enquiry to understand British young people's perspectives on seeking and sharing sex, relationships, and sexual health information online, this contributes to the understanding of the suitability of YouTube sex edutainment content with this audience.

Ethical approval was obtained from the university of Salford ethics panel for all aspects of the research (Ethics application HSR1920-057, letters of approval can be found in [Appendix C](#)) and the individual ethical aspects of each method are discussed in sections [4.3.3](#), [4.4.4](#), [4.4.7](#) and [4.5.5](#).

4.3 Phase 1: Understanding YouTube

Phase one of the research aimed to understand the opportunities and limitations of the YouTube platform for sex edutainment. In order to assess this the walkthrough method was utilised. This section will explore the walkthrough method, how it was conducted and what it contributes, alongside ethical considerations and how the data collected from this digital method was analysed.

4.3.1 Background to the Walkthrough method

To evaluate if and how YouTube can be used for independent sexual health learning we must understand the opportunities and limitations presented by the YouTube platform itself, and if the functionality and governance of the platform supports or hinders the production and distribution of sex edutainment content. To do this a walkthrough method reading of YouTube (both in app and website form) was conducted. The walkthrough method allows critical analysis of an app or website based on the functional design and architecture of the digital space (Light et al., 2016) to understand how this impacts the culture and networked publics enacted with the

platform. As Light et al., (2016) describe: “*The method involves establishing an app’s environment of expected use by identifying and describing its vision, operating model, and modes of governance. It then deploys a walkthrough technique to systematically and forensically step through the various stages of app registration and entry, everyday use, and discontinuation of use*” (p.1). At its most basic, a walkthrough is meticulously step-by-step going through a digital environment as an imagined user would. From sign up, to using the app/website for its intended purpose (e.g., watching videos on YouTube) and observing the messages and functionality of the space and their impacts. Although the method applies similar processes as the study of user experience design, it differs by providing a comprehensive view beyond just the design and user experience, delving also into the way the company constructs its identity and how this identity is manifested through choices in policy, governance, and revenue creation. In addition, the method is rooted in Actor-Network Theory, recognising that although the platform is not a human entity, the environment it creates is an actor impacting those who encounter it, making the walkthrough method an ideal choice due to the theoretical lens of this research.

ANT views the relationship between technology (or non-human actors) and humans as mutually shaping (Callon, 1989; Latour, 2005) identifying that humans shape technology but technology also has sociocultural effects on humans. Non-human actors such as the design and architecture of digital spaces often affect the types of interactions that take place within them (Papacharissi, 2009; Boyd & Ellison, 2007; Ellison et al., 2007; Donath, 2007). Papacharissi (2009) noted that the digital architecture of social media platforms affected the forms of social engagement that took place there; for example, identifying that whilst LinkedIn is designed as a professional space that encourages engagement with strangers and professional networking behaviour, Facebook requires users to accept each other as ‘friends’ and leads to more intimate, personal exchanges. In the context of this research, observing the design and user-facing features of the YouTube interface offers insights into the design and culture of the platform and how this shapes user behaviour. However, the walkthrough method also considers how users may resist the intended uses of a digital space and appropriate platforms for their own purposes (e.g., avoiding age controls by providing an incorrect age) to find ways around governance established by the platform.

The walkthrough method is well established in digital research (Duguay, 2017; Gerrard, 2018; Acker & Murthy, 2018; Duguay, Burgess, & Suzor, 2020; Beattie, 2021) Gerrard (2018) used the walkthrough method to interrogate different social media platforms content moderation of pro-anorexia content through hashtag moderation and found that hashtag moderation alone was not enough to stop the spread of problematic pro eating disorder content. The walkthrough method is also often part of a wider mixed-methods approach, Duguay (2017) utilised the walkthrough method but combined it with analysis of user-generated content and interviews in her study of how the platform characteristics of Instagram and Vine shaped identity performances of queer women who used them. This research will also use a combination of methods, with the walkthrough method acting as a complimentary part of a holistic view of understanding YouTube sex edutainment. It is important to note that the walkthrough method is subjective due to the reliance on the researcher's interpretation (Moller & Robards, 2019), however from an interpretivist standpoint, all research is subjective, and the researcher cannot be ignored in the creation of the research. Therefore, this research does not make any claims of complete objectivity, and the use of the walkthrough method can be best understood as a 'reading' of YouTube.

Whilst YouTube was not designed for the dissemination of sexual health information some features of the platform design and functionality may be conducive for this purpose (e.g., The ability to share videos with friends, and the platform being free at the point of access). However, given the complex sociocultural attitudes towards sex and sexualities explored in chapter 2 these may filter through to the platform governance and moderation of the platform, posing challenges to its use for sex edutainment (e.g., age controls on videos, YouTube policies about what is considered appropriate or inappropriate content) and cause constraints on sexual learning with YouTube. Thus, conducting a walkthrough of YouTube enabled interrogation of the suitability of the platform for sex education by examining everything from the practical functionality of the website and app, down to the way YouTube brand and position themselves as a company and what this tells us about the culture and activity it creates.

Whilst the walkthrough processes have been successfully used in digital research, this method has not been used in relation to sex education and the impacts of existing digital environments for dissemination of sexual health information. Therefore, the

selection of this method is not only novel in sexual health research but also provides new opportunities to understand the way social media platforms may compliment or complicate opportunities for disseminating sexual health information.

4.3.2 How the walkthrough method was conducted

The original walkthrough was conducted in April 2020, and an additional walkthrough was conducted in July 2021 to check for any key changes to features that had emerged during the research process. The walkthrough method is conducted in three stages. For each stage of the walkthrough the data is made up of detailed notes, observations, print screens, links, platform policy documents, app store descriptions, quotes from sources and video analysis collated to become the dataset. This is much like with content analysis of videos or policy documents where these observation elements themselves are the data. To conduct the walkthrough the following stages, informed by the method outlined by Light et al., (2016) were used:

Part one: Environment of expected use

The environment of expected use provides the context of the app/website and accounts for the way the platform describes and markets itself, as well as the socioeconomic factors which may drive the design of user experience (e.g., operating model). To establish the environment of expected use there are three steps to walk through: Vision, operating model and governance.

Vision - The vision of an app/website is a culmination of its purpose, intended use and target audience. To understand YouTube's vision their mission statement, app store and 'about' descriptions, and audience data were interrogated, alongside content from an advertising campaign YouTube were running on the platform at the time and the audience response to this.

Operating model - The operating model relates to the platform's business strategy, revenue generation and its impact on political and economic interests of the platform. Sources consulted for this aspect of the walkthrough included YouTube's revenue

reports, YouTube blogs used to communicate with content creators, press kits, industry insider blogs and exploration of YouTube paid products.

Governance - Exploring the governance of a platform involves identifying how the provider seeks to manage and regulate user activity to maintain their vision and contribute to their operating model. In this walkthrough the governance models were explored through interrogating, in detail, the terms of service, community guidelines, and reporting systems, particularly those with links to the focus of this research such as 'child safety', 'nudity and sexual content', 'Misinformation', and 'COVID-19 misinformation'³².

This first stage of the walkthrough also aligns with the first stage of Beer's (2009) threefold approach to research on Web 2.0 and participatory cultures. As with the walkthrough method, Beer (2009) suggests that analysing these platforms needs to begin with a broader understanding of the platforms themselves and how they operate, advocating for an interrogation of:

"the organizations that establish and cultivate Web 2.0 applications. This would require an understanding of the economics of the sites, how they create money and for whom, who is building the sites, what involvement they have after the initial stages and development, how they (or third-parties) harvest or data-mine the information that is created as users participate in creating content (often about themselves), and so on." (p. 998)

Although the walkthrough method had not yet been developed at Beer's time of writing, it utilises the same logic to begin an interrogation of an app or platform.

Part two: The technical walkthrough

This technical walkthrough required a walkthrough of the YouTube website and app³³ because they have subtle differences in use. The aim of this walkthrough was not to view every video or page on YouTube but to interact with all the features of the platform and follow a journey similar to that of a real user to understand the role the platform

³² Whilst COVID-19 misinformation does not directly relate to RSE, it demonstrates how YouTube are responding to health misinformation on their platform and may set a precedent for future understandings of how health-related misinformation may be dealt with on the platform.

³³ The Android YouTube app was used in this study, as the researcher also owned an Apple device using iOS, the iOS version was checked to ensure there were no large differences between the apps on the operating systems, however the walkthrough itself was not conducted on an iOS device.

itself plays. The technical walkthrough was broken up into three steps: Registration and entry, everyday use and app suspension, closure and leaving.

Registration and entry - For both the YouTube website and app the process of entering and access was walked through. This included the sign up and log in process, observing the details that users are required to share and what the initial welcome screens for the platform indicate.

Everyday use - The features, screens and pages a user is exposed to from their home page or app were studied in detail, observing the language, icons, colours and technical features and the potential cultural implications of these or how they might shape the user. Examples of everyday usage were performed to understand how the website and app informed them, scrolling the home screen, searching for videos, watching videos, and reading comments on video content. This related to both generic content on YouTube and sex and relationships content. An initial anonymous walkthrough of the YouTube website was carried out with no account, then the same walkthrough was conducted again twice on the app. Once with an account as a generic user, then again as an imagined user, in this case a 'young person' by setting up an account presenting as a 15-year-old girl³⁴ to understand how this may affect user experience such as the effects of age controls on viewable content when searching for sex education content. To do this, browser cookies were cleared to avoid traces of my own internet history impacting the data. The difference between the app and website centred mainly around registration, entry and suspension of use, therefore the imagined user walkthrough was conducted only on the app as the difference between the two platform choices was negligible, and Rich et al., (2020) noted in their study of young people's digital health seeking habits that young people's preferred technologies were smartphones and tablets, with 97% of their respondents owning a smartphone, these devices predominantly use the YouTube app rather than web browser, therefore the app was selected for the imagined-user walkthrough.

App suspension, closure and leaving - The final part of the everyday use walkthrough surrounds the ways users can temporarily or permanently leave an app/website. This

³⁴ As the researcher is not 15-years-old, and is older than the target population it is important to note that the process has to be imagined for this age range as best as possible, however 15-year-olds are not homogenous.

can be done through logging out, hiding a profile, deleting the app, suspending an account or removal of data through permanent deletion. For this aspect of the YouTube walkthrough the various opportunities for suspending or leaving the platform were explored and compared, including how the effects of the linkage between YouTube and Google (who now own YouTube) impact the ability to delete an account.

This second part of the walkthrough method also has parallels with Beer's (2009) approach to interrogating participatory cultures. Beer suggests that the technical aspects of the operability and functionality should be interrogated through some of the more technical aspects of the platforms use than those suggested by Light et al., (2016):

"[this stage is] concerned with the software infrastructures and their applications on the web. This would attempt to understand how these systems work, how algorithms are deployed, which data is fed into the algorithm, which relational databases are drawn upon, how metadata tagging feeds into searches and into what people find, and how the information held in profiles determines what the individual encounters. In short, this level would be concerned with the functionality and operability of the software." (Beer, 2009; 998)

In this walkthrough a combination of both approaches have been used, utilising the methods laid out by Light et al., (2016), but also paying attention to the ways algorithms and other hidden processes in the app may impact what the individual encounters in their everyday use of YouTube.

Part three: Assessing evidence of unexpected practices

The final stage of the walkthrough method is to observe the ways users resist the intended use of the platform, 'co-opt' the platform's features to serve alternative purposes or avoid following the rules of the space. This was done by reading the video descriptions of sex edutainment influencers to locate ways that they created alternative forms of income outside of YouTube's advertising model, viewing comments on videos to establish if any users described unexpected practices.

Part three of the walkthrough is where Light et al., (2016) differ somewhat from the third and final suggested area of analysis of web 2.0 participatory cultures identified by Beer (2009). Beer suggests this final phase should explore how the concerns of the previous two layers (the organisations business operation and the technical

functionality of the software) play out on the lives of those that use, or do not use, the web application. While assessing for evidence of unexpected practices (Light et al., 2016) could be considered to contribute to this, it does not provide in depth insight into the way the assemblage plays out in the lives of those using the platform. Therefore, this aspect will be explored further in phases two and three of the research that focus on influencers and young people who are actors in the assemblage and users (or non-users) of the platform.

4.3.3 Ethical considerations of the walkthrough method

Light et al., (2016) have highlighted two possible ethical concerns with the walkthrough method. The first is that consideration be taken, where possible, not to disturb users or influence them whilst conducting a walkthrough, Moller and Robards (2019) suggest that the walkthrough researcher should *'pay particular attention to the ways in which he or she becomes visible to other users, how such a presence might be perceived, how such a presence might negatively affect the users' sense of pleasure and safety and what kinds of risks the researcher might face'* (p.103) Therefore in this walkthrough of YouTube, no interaction was made with users (for example, commenting, direct messaging a user or having interaction). Secondly, the walkthrough can involve observations of user behaviour (e.g., reading user comments on videos) therefore all notes and observations of user behaviour should remain anonymous. As the walkthrough method does not require active communication or participation with individuals or the collection of any of their personal data and is instead a content analysis of a publicly available social media platform, the walkthrough theoretically does not require ethical approval, however for this study it was included as part of the university ethics application to ensure that this digital method was conducted with ethical rigour.

The walkthrough method also raises interesting questions around the use of publicly available internet content as data and how this is used ethically, the for-which I consulted the Association of Internet Researchers (AoIR) internet research ethical guidelines (Franze et al., 2020). These guidelines highlight that internet research using publicly available internet data is often an ethical judgement call, and there is no specific recipe for ethical internet research, only guidelines. However, the ethical

principles that drive ethical internet research are those that protect the anonymity, privacy and confidentiality of internet users, while also adhering to legal requirements and the storage of any sensitive data. For this reason, just as when conducting interviews, a researcher does not share the full interview in their findings, the direct data from the walkthrough will not be shared, but examples will be used to demonstrate the thematic findings from the walkthrough.

4.3.4 The walkthrough data analysis

Once the YouTube walkthrough had been conducted the data from each step of the process was collated together, providing over 25 pages of print screens, notes, observations, quotes from pages which formed the dataset. An example page from the walkthrough data can be seen below in figure 9 which shows some of the findings from the YouTube 'about' page and android app store description during the coding process that will be described in this section:

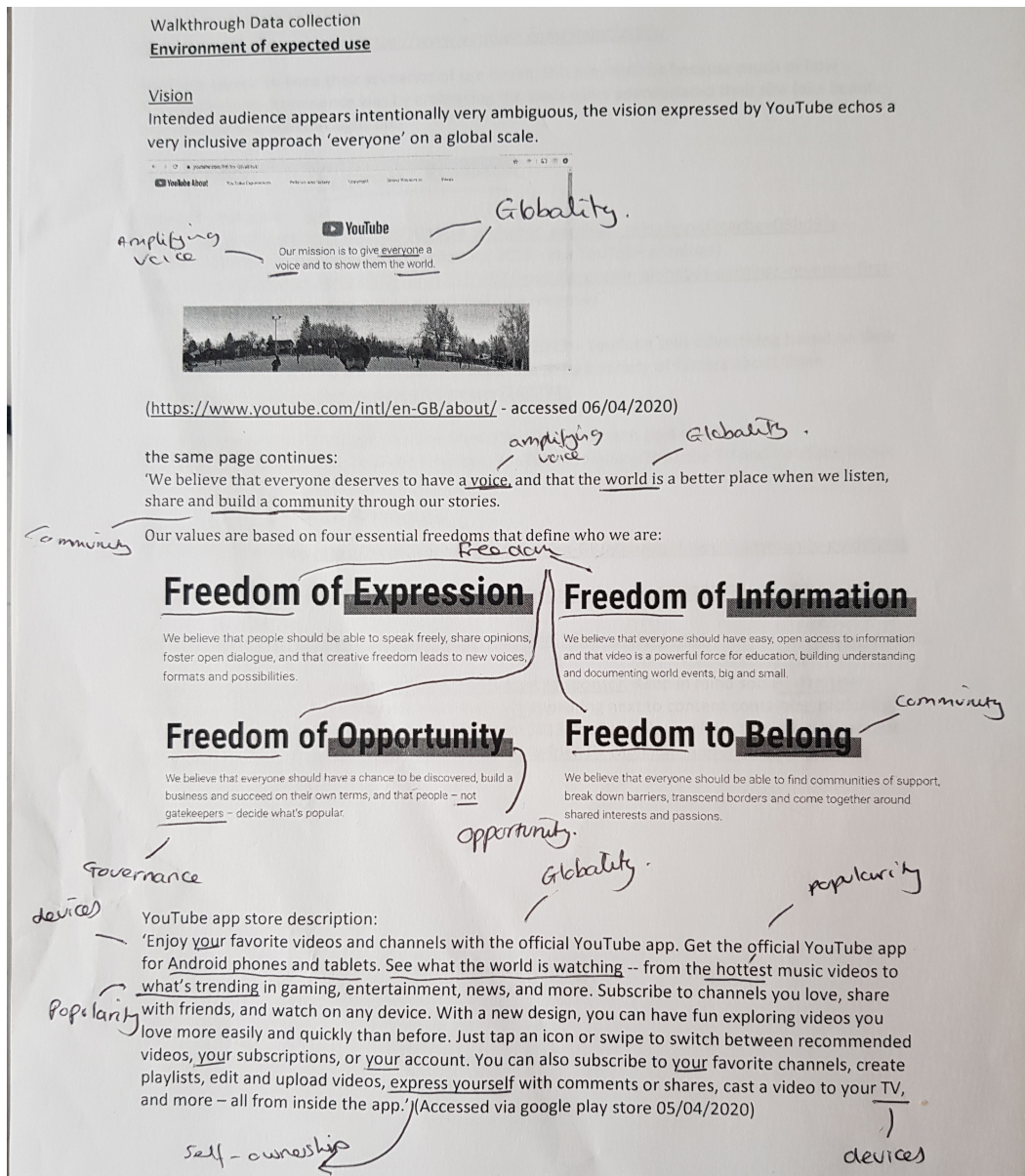


Figure 9 - Image from the walkthrough coding process

As there were three phases to this research and the data collected across the digital mixed-methods approach was varied, covering a wealth of perspectives and angles from which to view YouTube sex edutainment, reflexive thematic analysis (Braun and Clarke, 2006, 2018, 2019) was selected as the most appropriate method to view the broader story of YouTube sex edutainment across the data. Thematic analysis is a method of identifying common themes within qualitative data. There are various strands of thematic analysis, however reflexive thematic analysis distinguishes itself from other forms (such as codebook or coding reliability thematic analysis) by rejecting a positivist position and embracing the reflexivity of the researcher within the process

(Braun & Clarke, 2006). Braun and Clarke (2019) highlight the process is not objective, but instead relies on the researcher undergoing a journey with the data:

“Themes do not passively emerge from either data or coding; they are not ‘in’ the data, waiting to be identified and retrieved by the researcher. Themes are creative and interpretive stories about the data, produced at the intersection of the researcher’s theoretical assumptions, their analytic resources and skill, and the data themselves.” (p.594)

Thus, a reflexive approach to thematic analysis aligns best with the methodological underpinnings of this research identified earlier in this chapter. Reflexive thematic analysis is conducted using the steps established by Braun and Clarke (2006) in a recursive process, with movement back and forth between different steps in the analysis process:

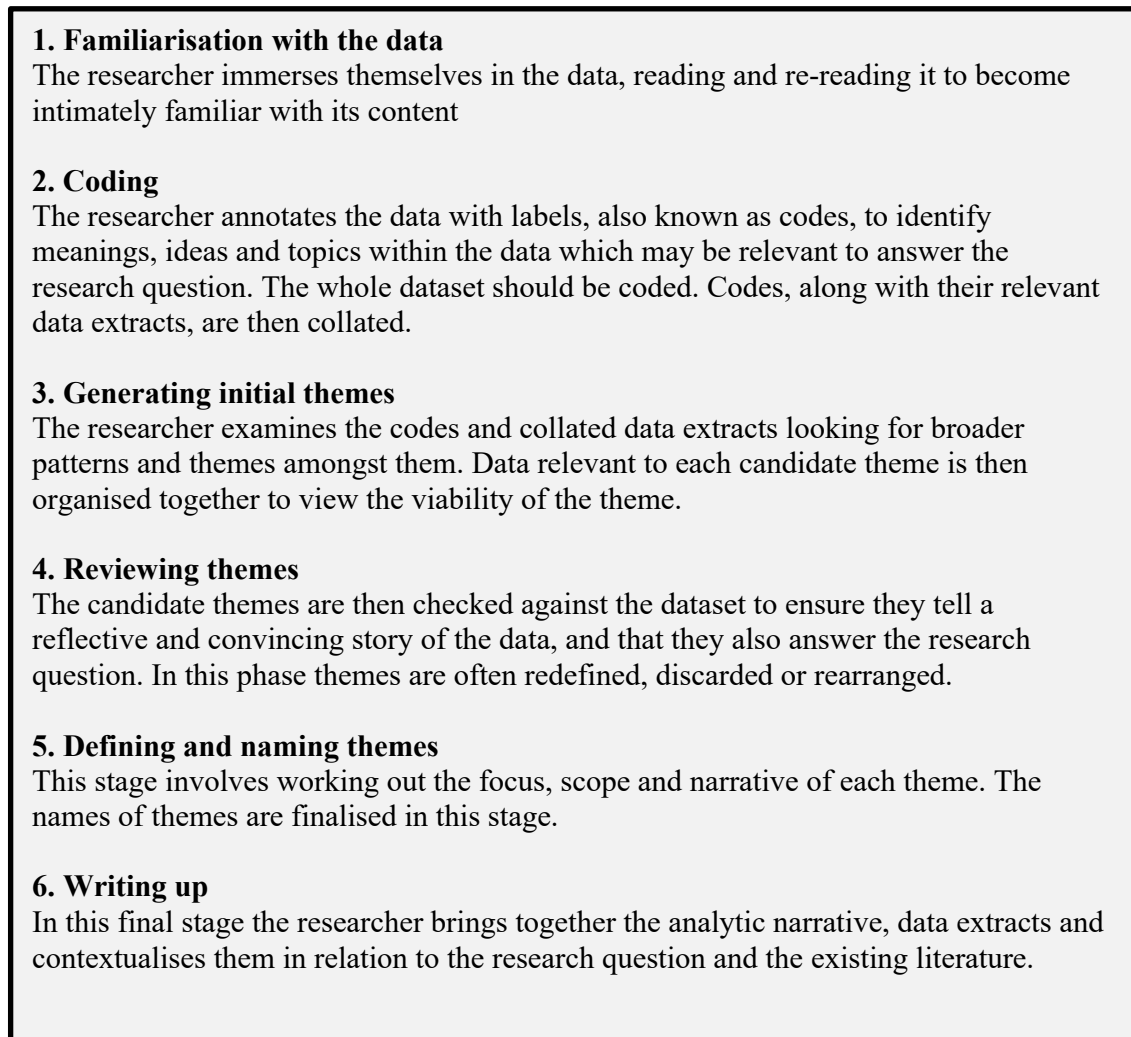


Figure 10 - Reflexive thematic analysis steps (adapted from Braun & Clarke, 2006)

Each separate method used across the three phrases of this research, with the exception of the development of the health influencer scale, used this process of thematic analysis.

To undergo this process for the walkthrough the dataset was read through several times in a process of familiarisation with the data (step 1), before being manually coded (step 2). The coding process involved working through each page of data, underlining and coding sections of notes, as can be seen in figure 9. This process was revisited twice to provide opportunity for ‘fresh eyes’ on the data in case any potential codes had been missed in the first coding. Once coded, the codes were grouped into 26 initial coding themes (step 3) which were reviewed into 6 themes that, as outlined within the Braun and Clark steps, were checked against the data, named, and defined (steps 4 and 5). Table 2 below contains the 6 final themes and the 26³⁵ initial themes that were grouped into these themes. These themes were then used to write the findings in chapter 5 (step 6).

| | | | | | | | |
|----------------------|---------------------|---------------------|---------------|-----------------------|----------------------|-----------------|----------|
| Community | | | | | | | |
| Community | Globality | Sharing | Interactivity | Influencers | Popularity | FOMO | Trolling |
| Governance | | | | | | | |
| Reporting / Flagging | | Algorithm | | | Age - restriction | | |
| Revenue | | | | | | | |
| Revenue | Advertising | Professionalisation | | Opportunity | | Brand identity | |
| User design features | | | | | | | |
| Sharing | Social media tropes | | Design | Interactivity | Device compatibility | Personalisation | |
| Freedom | | | | | | | |
| Freedom | Self - ownership | | Autonomy | Amplified voice | | Personalisation | |
| COVID-19 | | | | | | | |
| COVID-19 | | | | #WithMe ³⁶ | | | |

Table 2 - Loose initial themes and their related codes

³⁵ Sharing, interactivity and personalisation each appear twice in table 2 as they were felt to contribute to multiple categories. Therefore table 2 shows the 26 initial themes plus the repeats of these three initial themes.

³⁶ #WithMe was a campaign run by YouTube early in the COVID-19 pandemic about staying home and coming together on YouTube instead.

4.4 Phase 2: Understanding influencers

Phase 2 of the research aimed to understand influencers within the YouTube sex edutainment assemblage. To do this, three methods were used: the views of YouTube sex edutainment influencers were sought through email interviews, the relationship they have with their audience was investigated through the analysis of public comments on their sex edutainment content, and an influencer health framework was created to develop ways of thinking about how social media influencers fit into and expand existing structures of health influence. This section will discuss each of the methods used in the chronological order they were performed to demonstrate how my own thinking and definition of influencers expanded during the development of the research³⁷.

This section begins by explaining why email interviews were selected and the processes around recruitment, ethics, and analysis for this method. Afterwards, the scraping and analysis of using YouTube comments as a big data source is explored and ethically interrogated, before discussing the process used to create the health influencer framework and how this developed my own thinking about quantifying influencers.

4.4.1 Phase 2, Step 1 - Identifying YouTube sex edutainment influencers

To identify sex edutainment influencers for email interviews and whose videos would have comment analysis performed, I compiled a list of YouTube influencers with links to sex edutainment. This was a challenging task as the term ‘influencer’ has no commonly accepted definition or parameters of inclusion. The term has a background in social media marketing and Backshy et al., (2011) have suggested the term is fraught with ambiguity. This was noted in the literature as specific metrics and inclusion criteria of what made researchers consider someone an influencer was rarely included (Abidin, 2016a, 2016b; Jin, Muqaddam & Ryu, 2019; Nathaniel et al., 2017; Lou & Yuan, 2019; Xiao, Wang & Chan-Olmsted, 2018). A search for YouTube sex edutainment influencers was conducted between the 1st March 2019 and the 8th March 2019.

³⁷ However, in chapter 6 the results for phase 2 will be presented in a non-chronological order for the benefit of the narrative flow.

To locate Sex edutainment influencers I searched YouTube using the terms 'Sex Education', 'RSE', 'Relationships and sex education', 'SRE' and 'Sex and Relationships Education', which drew on similar keyword searching utilised in other YouTube studies (Smyth, Amlani, Fulton, et al; 2020). However, this provided limited results of influencer sex education content, in part as in January 2019 the streaming service Netflix released a teen-drama series titled 'Sex Education' and most of the results brought up by the recommendation algorithm were related to this series. In addition, I used the free version of www.influence.co, an influencer professional community used by Sabbagh, Boyland, Hankey and Parrett (2020) to locate influencers in their study, unfortunately as sex edutainment YouTube influencers are a very specific niche, this search also returned no results. Finally, I utilised articles found via the Google search engine where blogs and websites had compiled lists of '*5 best channels that teach sex education*' and asked within my professional network to locate potential YouTube sex edutainment influencers.

In total 22 YouTube influencer accounts were initially found that had recurring links to sex and relationships content³⁸. It is not possible to say this is an exhaustive list as it was not possible to use a systematic searching process, in part due to the nature of the YouTube algorithm, therefore this number should not be taken to be a comprehensive overview of the size of the sphere of influencers posting on these topics. I created a table which recorded the account name, number of subscribers, highest and lowest number of viewers per video, topics covered within their content, content style (e.g., vlog, travel videos, lifestyle content, product reviews, etc.) if their content was sponsored and by whom, and the location of each of these influencers³⁹.

In compiling the table, it became clear that whilst all 22 influencers posted some content related to sex and relationships, for many this was not the main focus of their account. To ensure that the focus remained on Sex edutainment influencers the criteria in table 3 below were applied to decide what constituted inclusion in this study:

³⁸ Many influencer accounts had one-off videos relating to RSE topics such as coming-out videos, or advice videos, however as this study sought to look specifically at Sex edutainment influencers, these influencers were not listed

³⁹ The anonymity of both influencers and those who commented on the videos has been protected in the writing of this thesis (as discussed in 4.4.4) therefore this table has been excluded from inclusion to avoid any risk of anonymity being broken.

| Criteria | Reason |
|--|--|
| A person/people using YouTube as a public-facing platform | Accounts must be public to be accessed by the audience of this study. |
| Not an organisation | The research focuses on influencers within the YouTube sex edutainment assemblage and whilst organisations can have influence I specifically sought social media influencers. |
| More than 40,000 ⁴⁰ YouTube subscribers | Based on the review of potential sex edutainment influencers, this number appears to separate those who are occasional posters on the topic from those who have chosen to make sex and relationships a specialism and taken on the role of expert. |
| Posting content predominantly related to sex education and inter-related topics. ⁴¹ | YouTube influencers in the review often posted varied content in different video styles. A focus was put on those who make sex and relationships their main priority as this made more likely to be a peer-educator with credibility on the subject. |

Table 3 - Criteria for influencer inclusion in study

Applying these criteria to the initial n=22 influencers, n=8⁴² YouTube sex edutainment influencers were identified. YouTube sex edutainment is a small niche with a limited number of influencers, however the influencers that met the inclusion criteria represented a range of intersectional sex education topics (general sex education, sex and disability, LGBTQ+ education, and religious perspectives). Although this research is focused on the UK, due to the small pool of potential influencers the decision was taken to include Sex edutainment influencers from other Anglosphere countries as well as British influencers, as long as they were English speaking. As YouTube is a global platform, audiences are not limited to watching videos from their geographical location alone, therefore it is just as likely that UK young people are watching American, Canadian or other English-language sex edutainment videos as they are British ones.

⁴⁰ Whilst the selection of 40,000 subscribers was chosen for the reasons described in table 5, the researcher's understanding on the quantification of influencers changed and developed later in the research process with the creation of the health influencer scale which is described in 4.4.9 and 6.1, a more detailed discussion of this development of thinking is discussed in the discussion of study limitations in 8.5

⁴¹ This was difficult to gauge as influencers often posted a variety of content or went through phases of posting different content, however if the influencer had a series of videos available on RSE related topics they were considered for inclusion.

⁴² One of the 8 influencers was a religious influencer who did not post the same sort of RSE content as the other influencers but posted advice videos from a religious and cultural minority perspective. This content was not the predominant feature of the influencers account, but they were selected for inclusion as they had a series of videos that provided a different view of RSE themes that filled one of the gaps identified in the literature review.

4.4.1.1 Influencer interview recruitment

The n=8 Sex edutainment influencers who met the inclusion criteria in [4.4.1](#) were contacted for an email interview. Influencers were approached and recruited through email contact, twitter, or direct messaging on social media platforms where they are active, and if relevant through their talent agents if this was the only available public contact they had because YouTube itself does not have a direct messaging function. To encourage participation influencers were advised why participation in the research may benefit them. For instance, how the findings may affect the way public health organisations choose to partner with influencers in future. Influencers who did not respond to their first invitation via their primary method of contact (email or agents) were then contacted a second time via direct messages on their social media. Due to a low response from the initially invited influencers, n=5 additional influencers who did not meet the initial requirements for inclusion but provided regular sex education content with fewer than 40,000 followers or in non-English language were also invited to participate in the email interviews.

4.4.1.2 Influencer email interviews

The n=8 sex edutainment influencers were contacted with an email interview consisting of n=10 questions to give content creators opportunity to provide their perspectives and experience. The questions aimed to understand influencers relationships with their audiences, identify challenges they experience and understand how public health organisations can work with influencers. Although a traditional in-depth form of interview would normally be selected for research like this, from conversations with professional contacts that have links with some of these sex edutainment influencers it became clear they frequently turn down researcher requests due to time restraints. In addition, Audrezet, Kerviler & Moulard (2020) sent email invitations to 100 influencers in their study, and received just 15 responses, thus due to the smaller niche of YouTube sex edutainment a shorter email interview format, that would not require influencers to be available at a specific time in the same way as a face-to-face or phone interview, was selected to make participation as convenient as possible to increase the likelihood of influencer response. However, email interviews are not without their problems as they do not allow a dialogue between interviewer and interviewee or the

reading of social cues (Bowden & Galindo-Gonzalez, 2015), they do not provide answers with as much depth and the researcher cannot prompt or clarify answers with the interviewee. Yet, whilst I felt other interview methods had strengths, making interviews accessible to influencers to encourage participation was prioritised to ensure data could be collected.

The 10 questions of the email interview were developed to contribute to the following research objectives, as can be seen in table 4 below.

- Objective 1) To identify opportunities and limitations of the YouTube platform for Relationships and Sex Education.
- Objective 3) To understand the views and role of Sex edutainment influencers and how partnerships could be developed with them.
- Objective 5) To understand how British 13-18-year-olds seek and share information about relationships, sex and sexual health.
- Objective 6) To understand how British 19-24-year-olds seek and share information about relationships, sex and sexual health to engage in continued sexual health learning after leaving school.

| Question | Reason for inclusion | Obj. met |
|--|---|-------------|
| What percentage of your audience demographic is made up of young people aged 13–18-years-old? ⁴³ | Audience demographics are not publicly available for YouTube accounts however the influencers behind them have easy access to these figures. This should give an idea of how many young people may be accessing these accounts. | O.5 |
| Do you get young people reaching out to you for advice on sex and relationship problems? If so, how do they contact you, roughly how often and do you try to respond to them all? | This question gives an indication of if young people not only view influencers content but see them as an approachable source of advice. | O.4 and O.6 |
| Have you found any platform policies from YouTube or other social media platforms you use have limited your ability to produce the content you would like? If so, please give examples. | This question gives an opportunity to understand if the non-human actor of YouTube (or other social media platforms) directly affect the content produced by sex edutainment influencers. | O.1 |
| Have you done any formal sexual health training? If not, is this something you would be interested in? | This gives an opportunity to identify both the current credentials of sex edutainment influencers and also to understand if sexual health organisations might be able to offer them training opportunities in future. | O.3 |
| How could public health or education organisations support you in creating Sex and Relationship Education content? | This question allows for influencers to speak back to ways they can be supported by public health organisations in creating quality content. | O.3 |
| What is the process necessary for public health organisations to work with you? | To understand the suitability of this form of communication for the sharing of public health agendas it is valuable to understand what is necessary for public health organisations to partner with these influencers. | O.3 |
| Have you worked with any public health organisations on your platform? (Either through sponsorship, campaigns or on a voluntary basis) | Identifies if this sort of partnership is already taking place. | O.3 |
| Do you read the comments on your videos? | Identifying if influencers read their comments demonstrates the dynamic between influencers and their audience. In doing so this shines a light on aspects such as power structures between influencers and audiences and if they are monitoring the environment created on the comments of their videos. | O.3 |
| Do you do any moderation of comments on your videos? | This question aids in understanding how moderation does or does not take place, which is valuable in understanding how possible it is for YouTube video comments to be a suitable safe space for young people seeking information. | O.1 |
| Do questions from your audience feed back into the content you make? | This question seeks to understand if the process of content creation is reciprocal. Do the influencers audience link back into the content created at all? | O.3 |

Table 4 - Influencer email interview development

⁴³ The researcher originally chose to focus on 13 – 18-year-olds for the research before deciding to expand the age group to include 19 – 24-year-olds due to their higher risk for STIs. The questions for the email interviews were developed before this was expanded, therefore influencers were only asked about 13-18-year olds.

4.4.1.3 Ethical considerations

All the influencers contacted were over 18 and able to provide informed consent, which was gained via email responses, therefore, there were limited ethical concerns for this aspect of the research however anonymity was considered an important ethical consideration. Answers provided by influencers were anonymised as for many influencers this is their business and taking part in research or publicly discussing behind the scenes topics or their challenges with platforms could cause adverse effects for their businesses, public reputations, or financial outcomes. Therefore, no names, ages or identifying features are disclosed in the research findings about the influencers. Anonymising data collected from this group also protected influencers from potential negative press, which could have caused reluctance to participate in the research.

4.4.1.4 Influencer interview analysis

The influencer email interviews were also analysed using reflexive thematic analysis (Braun & Clarke, 2019) using the process outlined in [section 4.3.4](#). The transcripts from each email interview were printed and manually coded. These codes were then organised into themes and tested against the data, being refined as part of the recursive process.

The final themes identified through this process are displayed in table 5 below:

| | | |
|--|------------------------------------|----------------------------------|
| Audience Make up | | |
| Audience make up | | |
| Contact from audience members | | |
| Response to private messages | Reading and moderation of comments | Audience feedback into comments |
| Training | | |
| Training | | |
| Problems with YouTube | | |
| Demonetisation | Restriction of content | |
| Working with public health organisations | | |
| Funding and adverts | Knowledge and partnership | Lack of public health engagement |

Table 5 – Final thematic findings from influencer email interviews

4.4.2 Phase 2, Step 2 - YouTube Comment Analysis

For phase two a narrative analysis was conducted on the YouTube comments from n=22 videos with sex education themes created by the n=8 YouTube sex edutainment influencers identified in section [4.4.1⁴⁴](#). This was designed to allow assessment of the public response to this type of content and how audiences communicated with the influencers and each other. In total the n=8 sex edutainment influencers had a combined total of n=827 videos related to sex and relationships themes, however, as can be seen in table 6 below, the majority (n=593) of the n=827 videos were posted by influencers 4, 5 and 7:

| Influencer | Number of sex ed related videos | Time span |
|-----------------|---------------------------------|-----------|
| 1 | 70 | 8 years |
| 2 | 57 | 6 years |
| 3 ⁴⁵ | 28 | 5 years |
| 4 | 143 | 8 years |
| 5 | 118 | 11 years |
| 6 | 29 | 5 years |
| 7 | 332 | 7 years |
| 8 | 50 | 5 years |

Table 6 – YouTube sex edutainment influencer videos

I selected 2-3⁴⁶ videos from each influencer, with the exception of influencer 4 who was a British sex edutainment influencer with a large amount of content, as this research looks specifically at a British context more videos (n=5) were selected for inclusion from this influencer. Videos were selected on a variety of intersectional topics that addressed information gaps identified in Chapter 2 (e.g., pleasure, disability,

⁴⁴ The YouTube videos were selected and analysed concurrently with the sending of the email interviews in 4.4.2. For this reason the additional 5 influencers contacted for email interviews because of limited response were selected after the influencers and videos for YouTube comment analysis and were not included for this aspect of the research as they did not meet the original inclusion criteria, and the 8 initially selected influencers had enough videos and data to meet the needs to the study.

⁴⁵ Influencer 3 also participated in the email interviews in 4.4.2. None of the other 8 influencers in the original influencer selection chose to respond.

⁴⁶ This allowed the researcher to observe patterns across differences between influencers (e.g. Does the number of followers, gender, sexuality, or religion of the influencer affect the responses they receive), as well as to see if the topics of the videos themselves affect the type of response.

LGBTQ+, religion) that young people may seek to fill on social media, as well as more generic sex education related topics as can be seen in table 7 below:

| Influencer | Video topic | Male/Female influencer | Number of video comments as of 17/03/2020 |
|------------|---|------------------------|---|
| 1 | Nude photos | Female | 987 |
| 1 | Spotting red flags in relationships | Female | 556 |
| 2 | Trans sex education | Non-binary | 568 |
| 2 | Packing | Non-binary | 541 |
| 2 | Asexuality | Non-binary | 3270 |
| 3 | Gay sex education | Male | 176 |
| 3 | Untreatable STDs | Male | 63 |
| 4 | Masturbation | Female | 1879 |
| 4 | Relationship abuse | Female | 172 |
| 4 | Disability and sex | Female | 698 |
| 4 | What I wish I learned in RSE | Female | 763 |
| 4 | Questions to ask before having sex with someone | Female | 328 |
| 5 | Consent | Female | 14236 |
| 5 | Intersex | Female | 8918 |
| 5 | Virginit | Female | 3497 |
| 6 | Coming out stories | Male | 12105 |
| 6 | Gay Q & A | Male | 5029 |
| 7 | Does size matter | Female | 2293 |
| 7 | Vaginismus | Female | 257 |
| 7 | Relationship advice | Female | 238 |
| 8 | Wedding night tips (religion based) | Female | 3538 |
| 8 | Same sex attraction (religion based) | Female | 598 |

Table 7 – Videos selected for inclusion

The videos selected were created and uploaded to YouTube between 19th October 2012 – 17th March 2020 to provide both recent and older content.

All public comments from the videos selected were downloaded using the YouTube Comment Scraper⁴⁷ on the 26th April 2020. The total data set across all 22 videos consisted of 60,710 comments. Content analysis was then performed on the data using the Big Content Machine (BCM)⁴⁸ to discover narrative patterns within the comments. The BCM can be used to search and find themes within large sets of data, allows the

⁴⁷ The YouTube Comment Scraper was developed by Philip Klostermann and allows researchers to download all the comments, responses, likes and information regarding comments from YouTube videos. The comment scraper can currently be found at: <http://www.netlab.dk/services/tools-and-tutorials/youtube-comment-scraper/>

⁴⁸ The BCM is a lightweight open-source software tool available at the University of Salford that allows the analysis of large sets of conversational data extracted from online platforms

observation of meta-narratives and patterns in the data including word frequencies or most common words and phrases, a detailed description of the BCM data analysis process for this see section [4.4.8](#).

4.4.2.1 Ethical considerations: Using public social media data

The ethics of the use of big data in research, particularly from social media datasets, has been highly debated (Conway & O'Connor, 2016; Langlois, Redden & Elmer, 2015; Schroeder, 2014; Zwitter, 2014). Whilst the big data from social media has also been welcomed as a '*data gold rush*' for researchers (Felt, 2016) filled with research potential, it also requires researchers to tread carefully in order to conduct ethical research. The AoIR ethical guidelines (Franze et al., 2020) were consulted to ensure that this research remained ethical whilst tackling the challenges posed by big data research.

This research involves the use of data scraping from the social media platform YouTube. When scraping comments from public YouTube videos the commenters on these videos will not have consented to participation in research. Although they have written comments publicly that are accessible to anyone online it is important that the research protects their anonymity, especially given the sensitive nature of the topic in this study. As it is not possible to track down over 60,000 commenters to receive consent, it is imperative to treat their data, privacy and rights with the upmost respect and ethical integrity (Franze et al., 2020). As commenters have not consented to participation in this research the findings were anonymised, this is why the videos and influencers selected for this research have been anonymised beyond the characteristics that were vital to communicate for research purposes to prevent the videos, and thus user comments being identified.

Light, Mitchell and Wikstrom (2017) deliberated similar ethical considerations for their use of scraped data from a hook-up app for public sex between men and found it crucial to consider not what data *could* be collected but what data *should* be collected to provide insights without jeopardising the privacy and anonymity of the app users. Their work highlights the importance when working with big social media data that the data set collected and presented is not identifying users in any way (Light, Mitchell & Wikstrom, 2017; Franze et al., 2020). Therefore, within this research no locations, ages

or other identifying features will be collected as this data is not needed to get an overall view of the metanarrative of public responses to the YouTube videos. Usernames will be included in the dataset but not disclosed in findings⁴⁹, and only collected to allow observation of conversation patterns of repeat commenters. Finally, no direct quotes of full comments will be shared in the research findings, although small phrases representative of common sentiments will be used. Where a small phrase from a comment is used in the research findings Google searches were conducted to ensure that those phrases cannot be combined with other information in the thesis to locate the comment or commenter's identity.

4.4.2.2 YouTube comment data analysis and using the BCM

The YouTube comment dataset contained n=60,710 combined comments. Venturini et al., (2018) suggest, researchers shouldn't try to be exhaustive when working with 'big data' datasets but should instead describe explicitly the operations of selection and transformation that shaped the data analysis.

For this reason, a stepped approach for analysing large social media datasets that combined framework with content analysis (Vasilica, Oates, Clausner, et al., 2021) was selected. I am experienced with this method of analysis, having used it in other research with similarly sized social media datasets (Garwood-Cross, Vasilica, Ormandy & Finnigan, 2021; Vasilica, Garwood-Cross, Finnigan, et al., 2021). This stepped approach is a process of familiarisation with and sense making of the data. Figure 11 (below) identifies how this process was conducted in this research, with the sections in red indicating where directed analysis of the data was conducted using the BCM.

⁴⁹ The YouTube comment scraper collects the usernames, and profile links for all commenters, but not their age or location. The usernames were kept within the dataset so the researcher could identify repeat-commenters, but channel links were immediately deleted.

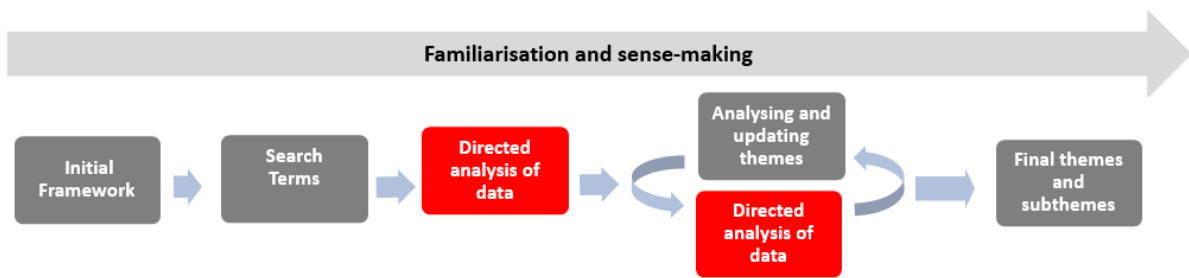


Figure 11 – Stepped social media analysis approach based on Vasilica, Oates, Clausner, et al., (2021)

The stepped approach begins with the creation of an initial framework that can be used to direct the analysis. The initial framework below (table 8) was created through a combination of themes contrived from the research objectives, literature review, the walkthrough analysis findings from phase 1, and reading the first n=1000 comments from each of the n=22 videos. The comments per video ranged from n=63 comments to n=14,236 comments, therefore due to the large number of comments on some videos, the first n=1000 comments on each video were read as a manageable way to familiarise with the data. This meant that n=13 of the n=22 videos had all comments read, and n=9 videos had the first n=1000 comments read, to inform the creation of the initial search framework.

| Initial search framework | | | | | |
|----------------------------------|---------------------|--------------------------|-----------------------|---|--|
| Influencer/audience relationship | | | | | |
| Gratitude | helped | Trust | Distrust | Peer-relationship with influencer | |
| RSE experience | | | | | |
| school | parents | | | | |
| Community | | | | | |
| Sharing experience | Trolling | Seeking advice | Giving advice | Sharing videos/ their content | Connecting/ creating community with others in comments |
| Governance | | | | | |
| YouTube | Gatekeepers | Algorithms | Platform features | | |
| Information | | | | | |
| Lack of information | Information seeking | Learning new world views | Disputing information | Routes to finding this video/ information | |
| YouTube Business | | | | | |
| Sponsorship/ads | Production values | | | | |
| Under 18s | | | | | |
| Young people aged 18 and under | | | | | |

Table 8 – Initial framework for YouTube comment analysis

This framework shown in table 8 was then used create search terms that could be used to direct the searching of the full dataset using the search features of the BCM. For example, the first subtheme, under Influencer/audience relationship, within the framework is 'gratitude', for this search terms included 'thanks', 'thank you', and 'grateful', whilst for the theme 'helped' the search terms included 'helpful'. 'helped', 'useful', 'help', and 'helping'. For each sub-theme these search terms were generated and tested on the data using the BCM. Data analysis with very large social media data sets are limited by what you search. For example, people use many different words to describe the same thing, or may use misspellings, abbreviations or slang terminology not known to the researcher. Therefore, whilst I aimed to complete as detailed a search as possible and informed the search by reading the first 1000 comments on each video to identify any of abbreviations or slang terminology, no claims are made that this is exhaustive. The BCM allows the researcher to import a data source and search several AND/OR combinations at the same time within specific fields of the data. Below (figure 12) is an example of how part of the search for gratitude would appear as a command:

The screenshot shows the BCM search interface. On the left, under 'Search in columns', there is a list of checkboxes: 'authorLink', 'authorThumb', 'text' (checked), 'likes', 'time', and 'timestamp'. Below this list are 'Select all' and 'Clear all' links. On the right, under 'Search terms', there are three rows of search boxes. The first row contains 'thank', 'AND', 'you', 'AND', and an empty box. Below this is an 'OR' separator. The second row contains 'thanks', 'AND', an empty box, 'AND', and another empty box. Below this is another 'OR' separator. The third row contains 'grateful', 'AND', an empty box, 'AND', and a final empty box. At the bottom, there are three checkboxes: 'Case-sensitive' (unchecked), 'Search for whole words' (checked), and 'Flexible search' (unchecked). An information icon is located to the right of the 'Flexible search' checkbox.

Figure 12 – Example search in the BCM

The search terms were applied to the data from each video separately, rather than treating all n=22 videos as a single data file, n=22 separate data files were used for the 'directed analysis of data' and 'analysing and updating themes' stages. This allowed comparison between videos during the analysis and writing process. Whilst collating the data to a single file would have been a quicker process and could have provided a singular view of the overall response to YouTube sex edutainment influencers, it would have failed to recognise that YouTube sex edutainment influencers are not a homogenous group (see section 4.4.1). They have different approaches to content creation, different niche interests and each have their own relationship with their audience, therefore viewing the response to them and their

content combined would negate the opportunity to recognise the nuance between influencers.

The search terms were used to conduct directed analysis of the data, to locate comments within the data that provided depth and understanding of the themes. These comments were then compiled by theme and subtheme in a spreadsheet, with one page per video. This formed a recursive process where if a theme came up frequently in the comments of a video, the content on the previously analysed videos were reviewed to look for that theme to continually improve understanding of themes within the data and look for common threads throughout the wider dataset. The themes were continually redefined and developed through this process, with weaker themes being discarded and new themes developing until the final themes and subthemes emerged, as seen in table 9 below:

| Final themes and subthemes | | | | |
|---|-----------------------------------|----------------|-----------------------|---|
| Educational potential | | | | |
| Information (seeking information, learning new world views, previous lack of information) | Sharing videos and their content | Gratitude | helpful | RSE experience (school and parents) |
| Role models | | | | |
| Trust | Peer relationship with influencer | Seeking advice | | Sharing experience |
| Resistance | | | | |
| Sponsorship/ads | Trolling | | Disputing information | |
| Peer support and community safety between commenters | | | | |
| Sharing experience | Giving advice | Seeking advice | Platform features | Connecting / creating community with others in comments |

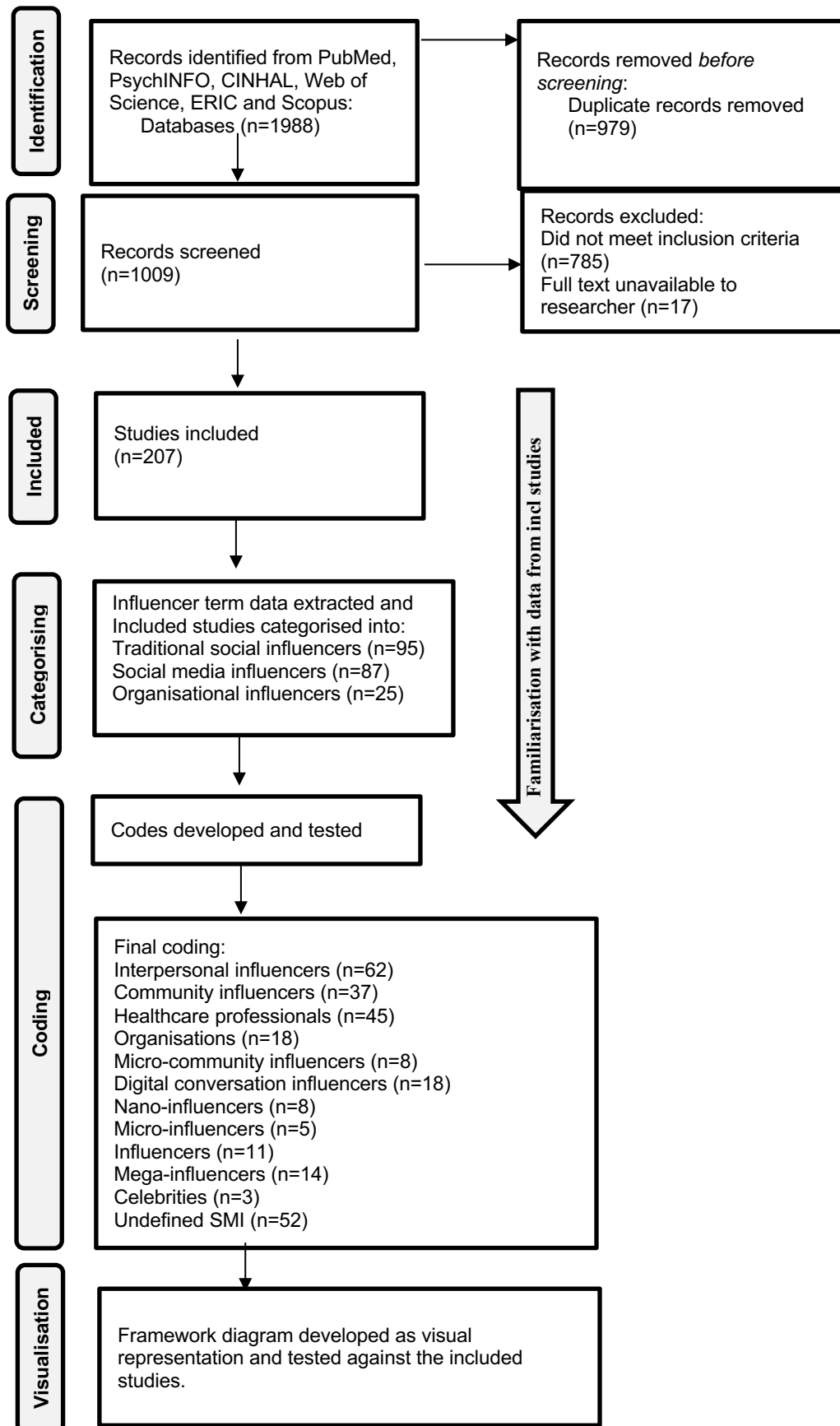
Table 9 – Final themes and subthemes from comment data

In addition to the qualitative analysis described above, the BCM was also used to perform quantitative analysis on the data. The 'word and phrase frequencies' function which can organise the most frequently used words and phrases in a data set was used to obtain the top 100 most commonly used 1-word, 2-word, 3-word and 4-word phrases for each video. This provided an opportunity to quantify the words and phrases used most frequently to identify if it revealed anything about the broader conversational patterns happening within each video.

4.4.3 Phase 3, step 3 - Developing the Health Influencer Framework

Having conducted the systematic review of studies about social media influencers and health ([in section 3.7](#)) it was noted that there was ambiguity around the terms used to describe influencers as there is no definitive theoretical definition of an 'influencer' (Martinez-Lopez et al., 2020; Chopra, Avhad & Jaju, 2021) and many studies referring to 'influencers' were describing traditional non-digital influencers such as family, peers and healthcare practitioners. Unclear specifications of what researchers meant by 'influencer' made conducting the review challenging. Therefore, I identified a gap in knowledge around defining and understanding influencers and locating their influence compared to traditional structures of influence. To fill this gap, I developed a health influencer framework to aid the understanding of influencers, using sorting and categorisation of existing published and peer-reviewed journal studies about influencers in health.

Having already conducted a detailed database search for influencers and health while completing the review in chapter 3 ([see Appendix I](#)), the same search findings were used as the basis for building the health influencer framework therefore the search strategy applied in the identification stage of flow diagram 1 below mirrors that of the systematic review, however an alternative process and screening were used for the development of the health influencer framework as shown in the flow diagram below:



Flow diagram 1 - Development of the health influencer framework

I used the screening process as an opportunity for familiarisation with the data that met the criteria, making note of emerging patterns and repeating terms around the description of influencers. Based on these patterns, all studies that met the criteria were initially organised into 3 spreadsheet pages: Traditional social influencers; social media influencers and organisational influencers. For each paper, the type of influencer (e.g., peers, parents, health professional) was recorded, or alternatively for social media influencers the platform was recorded, the term used by the authors to describe social media influencers was noted, as well as any description provided by the authors of what they considered an influencer to be.

Each study was then coded with the type of influencers it featured. Where a study mentioned multiple types of influencers a second or third code was allocated to the study for each type of influencer. Codes were developed from the terms used within the studies. This coding was then used to group the types of health influencer and develop definitions and understandings of how they related to each other. Several studies used conflicting terms or did not provide a definition or quantifiable features of what they considered an influencer, therefore I had to negotiate between these to create a coherent framework, testing variants and different presentations for the framework against the studies that informed it to ensure it could be used as a starting point for researchers to understand how social media influencers in their various different forms fit into existing structures of health influence. For example, I initially tried presenting the framework as three overlapping circles, however, when checking this against the studies I felt it did not represent the balance and difference between the apparent amount of influence and size of audience that appeared to be key in understanding the difference between traditional health influencers and social media influencers. Therefore, I utilised a recursive process to develop a visual framework that represented what the coded studies revealed.

Although it could be argued that this process is an extension of a literature review, it was conducted separately to the literature process alongside the data collection, viewing the information from the literature as its own dataset to be coded and interpreted to aid in my own understanding of how social media influencers fit into existing forms of health influence. Thus it is not a review of the literature, but uses the definitions present in the literature as a foundation upon which I have developed my

own thoughts and created a framework. The intention of its inclusion in the findings of this research is to aid other scholars in this field by providing them with a starting point from which to situate their own thinking around social media influencers and the wider spectrum of health influence. I believe it may also have value when communicating with additional public health stakeholders such as charities or health organisations.

4.5 Phase 3: Understanding young people's experiences and sharing practices

Phase three sought to understand the opinions of young people, as the third and final key actor in the YouTube sex edutainment assemblage being studied in this thesis. This phase centred on understanding the seeking and sharing practices of young people around sex, relationships, and sexual health information. For phase 3 online surveys, one for young people aged 13-18-years-old (those in compulsory education) and one for young people aged 19-24-years-old (who are post-compulsory education), were conducted.

4.5.1 Online surveys

Online surveys are a well-established method (Andrews, Nonnecke & Preece, 2003; Wright, 2005; Robinson, Davies & Smith, 2017) which were selected to bring the voice of British young people into the understanding of how they may fit into the YouTube sex edutainment assemblage. Initially the research design intended for one survey for 13-18-year-olds, however as the data from the YouTube comments in phase 2 were analysed, it was noted that the sentiment of 'I wish I had learned this in school' by commenters who appeared to be past school age appeared multiple times, this raised the question of how those post-school might be using these digital resources to fill information needs left from their education. In addition, 20-24-year-olds have the highest rate of Sexually Transmitted Infection (STI) transmission for most STIs (Public Health England, 2019), and in 2019 NICE updated the guideline scope for preventing STIs and identified that young people aged 16-24-years-old were a key focus (NICE, 2019). The Royal College of Nursing have also identified that '*PHE is undertaking work to raise awareness of STI's in the 16 to 24 year old age group*' (Royal College of Nursing, 2021). Given this, the focus was expanded to 13-24-year-olds and an additional survey was created for 19-24-year-olds who are post compulsory education.

Lensvelt-Mulders (2008) highlights that surveying on sensitive topics affects every part of the research process, and that one aspect of this is challenges in non-response rates and recruiting respondents as they may be uncomfortable. One way that Lensvelt-Mulders suggests overcoming this challenge is 'increasing the respondent's perceived privacy protection'. Online surveys are therefore frequently selected for studies around sensitive topics such as health and sex (Van Gelder, Bretveld, & Roeleveld, 2010; Whitfield., Jomeen, Hayter, & Gardiner, 2013; Jones et al., 2016; Wery & Billieux, 2016; Regmi, Waithaka, Paudyal, Simkhada, & Van Teijlingen, 2016; Montagni, Cariou, Tzourio, & González-Caballero, 2019; Currin, Hubach & Croff, 2020) sometimes specifically due to the opportunities they provide for respondent anonymity (Brotto, Knudson, Inskip, *et al.*, 2010). Robertson, Tran, Lewark & Epstein (2018) found in their study of how methods impacted disclosure of sexual orientation that subjects reported being most comfortable with anonymous online surveys over alternative methods such as face-to-face interviews, filmed interviews, and non-anonymous online surveys. Given the sensitive topic of this thesis and that young people are a vulnerable population, participant comfort was ethically important, making online surveys preferable.

Additional benefits of online surveys include their low cost, speed to conduct and lack of geographical limitations and (Montagni, Cariou, Tzourio, & González-Caballero, 2019; Nayak & Narayan, 2019). Evans and Mathur (2018) also note the flexibility and convenience of being able to participate anywhere at any anytime which may appeal to participants, and Montagni, Cariou, Tzourio, & González-Caballero (2019) suggest online surveys are well suited to young people, who are largely digitally active, because of their '*ease with web-based technologies*'. However, online surveys are not without their limitations. They may exclude non-internet users and create a bias in the sample towards internet users. As this study is looking at use of the internet and social media for sexual health information seeking this could have impacted the results, although alternative recruitment using schools was also attempted ([see section 4.5.4](#)), the data collected should not be considered representative of all young people for this reason, amongst others discussed in section 4.5.4. Concerns have also been raised about poor response rates to online surveys (Van Gelder, Bretveld, & Roeleveld, 2010; Nayak & Narayan, 2019), and the storage of data from online surveys (Buchanan & Hvizdak, 2009). However, whilst the problems associated with online surveys have been

considered, the benefits of this method outweighed the problems and I aimed to combat low completion rates through recruiting via both social media and schools, and protected data according to the UK GDPR⁵⁰ regulations.

The survey was designed, piloted and distributed using JISC Online Surveys (formerly known as Bristol Online Surveys). This software was selected for its UK GDPR compliance, prevalence in academic circles and availability at the University of Salford.

4.5.2 Developing the survey questions

The survey contained four parts. Part one, containing n=13 questions, asked about social media and influencers, gathering information. Part two took a different format. Lensvelt-Mulders (2008) states '*Writing a question in the form of a short story, in which the situation is explained and the respondent is cleared of the incriminating behavior is helpful in sensitive studies.*' (p469) whilst this study does not ask young people about incriminating behaviour, the topics may still be sensitive to young people. Therefore, part two contained n=2 imagined scenario questions to engage young people in thinking on the topic about what they would do if a friend had a relationship problem, and how they would act if they found information online about a sexuality concern a friend had told them about. This was also used to avoid bias through the grouping of questions and gather young people's instinctive thoughts on the topic before their ideas had been stimulated by further questions. Part three focused on sex and relationships information seeking, both using offline and online sources and asked about respondents' prior experience of RSE. To avoid unnecessary sensitive topics, participants were not asked for personal information about their sex lives. Part three contained n=17 questions for 13-18-year-olds, and n=15 questions for 19-24-year-olds, as the younger cohort were additionally asked if the COVID-19 pandemic had affected their school RSE lessons. Finally, the fourth part of the survey obtained demographic data from participants such as their age, gender identity, sexual orientation, ethnicity, and religion, and contained n=5 questions.

⁵⁰ General Data Protection Regulations were in put in effect at the start of the research project whilst the UK was still a member of the European Union, however the UK have since created their own UK GDPR regulations since leaving the EU that offer similar data protections.

It has been suggested that survey length can impact the quality of responses received if too long (Herzog & Bachman, 1981) and Revilla and Ochoa (2017) have suggested that an ideal survey length for online surveys is 10 minutes, with a maximum length of 20 minutes. For this reason, the survey was designed to take 10 minutes to complete and was tested by the researcher and piloted with young people ([details in section 4.5.3](#)) to ensure it was not too long, to avoid reducing the quality of data or having respondent drop-outs.

In selecting and phrasing questions for inclusion, where it was possible to use questions from previously validated surveys that had been used with similar age groups to meet the research objectives these were prioritised. Validated surveys were located using the UK Data Service variable and question bank⁵¹ and google searching. Questions around device, internet and social media use were validated using the Teens, Social media and technology questionnaire 2018 (Anderson & Jiang, 2021) and Global Kids Online Questionnaire 2016⁵². Demographic questions were validated using the 2014 Health Survey for England⁵³, the 2011 UK Census⁵⁴ and the 2017 National LGBT survey⁵⁵. Where a validated survey could not be located, questions were designed to meet the research objectives or based on previous academic published work. [Appendix D](#) contains a full breakdown of every question used for the survey, which validated surveys they came from, any adaptations made from the validated survey and the rationale for the questions inclusion if it did not come from a validated source. The same survey was used for both age cohorts, however some small changes were made to make questions more relevant to the older cohort. A question about the effects of COVID-19 on RSE was removed for the 19-24-year-olds whose experiences of school based RSE were unlikely to be affected by the COVID-19 pandemic and school closures. In addition, one question about RSE experience was rephrased to past tense for the older cohort, and the phrasing of one imagined scenario question was altered so the context was more appropriate to the older cohort. 13-18-year-olds were given the scenario '*A friend tells you that they are having trouble*

⁵¹ Available at: <https://discover.ukdataservice.ac.uk/variables>

⁵² Available at: <http://globalkidsonline.net/wp-content/uploads/2016/04/GKO-questionnaire-27-Oct-2016.pdf>

⁵³ Available at: <https://digital.nhs.uk/data-and-information/publications/statistical/health-survey-for-england/health-survey-for-england-2014>

⁵⁴ Available at:

<https://www.ons.gov.uk/census/censustransformationprogramme/questiondevelopment/nationalidentityethnicgrouplanguageandreligionquestiondevelopmentforcensus2021>

⁵⁵ Available at: <https://equalities.blog.gov.uk/2017/07/28/lgbtsurvey-asking-about-your-sex-and-gender-identity/>

in their relationship. Their partner wants them to have sex but they do not feel ready. They don't know how to say no to their partner without upsetting them. Your friend asks you for advice, what do you do?' Meanwhile the 19-24-year-olds had a slight adaption where the second sentence was replaced with *'Their partner often pressures them into sex when they don't feel like it'* for relevance.

Appendices E and F contain the final survey instruments for 13-18-year-olds and 19 – 24-year-olds and their corresponding information sheets and consent forms.

4.5.3 Piloting the online survey

The survey was piloted with n=13 young people aged between 13-18-years-old before launch. Pilot participants were recruited using social media and the survey remained open for a four-week period. The pilot respondents ranged from 13-18-years-old, with more 17 and 18-year-olds completing the pilot survey than younger respondents:

41 Q32. How old are you?

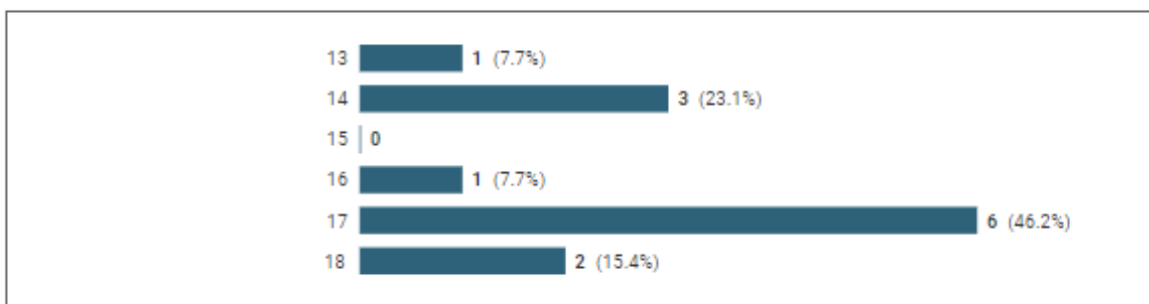


Figure 13 – Pilot respondent ages

At the end of each section of the survey the pilot group were asked the following questions (see figure 14 below):

Whilst taking this section of the survey did you find there were any questions that you didn't understand? If so please write any notes about them in the box below

Whilst taking this section of the survey did you find there were answers missing that you would have selected had they been available? If so please write any notes about them in the box below

Did you find any of the questions in this section distressing or uncomfortable? If so please write any notes about them in the box below

Figure 14 - Pilot survey section feedback questions

The first of these questions checked that all questions could be understood by 13-18-year-olds, this was particularly important in the case of questions that were previously unvalidated. None of the respondents indicated that there were any questions they did not understand. At the end of the survey the pilot respondents were also asked to complete three feedback questions on the overall survey length, layout, and relevance to them.

Page 7: Pilot feedback

Having answered the questions for the survey, please provide your feedback on the survey through the questions below.

How did you find the length of the survey?

- Too short A little short Just right
 A little long Too long

How did you find the ease of answering the questions overall in terms of layout?

Did you feel the questions had relevance to you, or do you think there is a need to recruit different people?

Figure 15 - Pilot study overall feedback questions

Across the pilot only one young person noted that they found a section uncomfortable, and this was the imagined scenario section, however they did not provide any details of which question or why, therefore it was not possible to take any action on this. N=11 respondents said they survey layout was 'easy' or 'very easy' to answer, the remaining two respondents did not respond to the question. 69.2% of pilot respondents felt the survey length was 'just right', and 30.8% selected that it was 'a little long'.

Finally, in asking the pilot respondents if they felt the survey had relevance to them, n=9 of the n=13 participants who answered the question felt it was relevant to them, with responses including; *'I think everyone can relate to some of the questions'*, *'Had relevance to my age group and scenarios that happen'*, and *'I think the questions had relevance and felt comfortable answering them'*. Three young people felt it was not relevant to them, with one stating *'I think I'm probably a bit young to feel comfortable talking to my friends on the subject of sex and relationships'* but the other adding *'They didn't really have relevance but I think it's good that I did it as it's good to talk about*

things like sex and relationships especially at this age'. This does raise an interesting question of if young people feel information about relationships, sex and sexual health is only relevant to them if they are sexually active or likely to be soon. Finally, based on the feedback from the pilot small changes were made to the drop-down question options of two questions based on answers provided by pilot respondents (e.g., the addition of a new option of 'TikTok' for social media platforms used).

4.5.4 Recruiting the online survey

The online survey was distributed via social media and for the 13-18-year-olds survey contact with UK schools was also utilised. Participants were self-selecting and the survey sample did not attempt to be representational of the entire population of UK 13-24-year-olds, instead aiming to provide initial insight and depth into the topic.

Participants were recruited through sharing the survey link on the social media platforms Facebook, Instagram, reddit and Twitter, including an Instagram account I run that had over 15,000 followers (a large number of them parents). National sexual health organisations were tagged in recruitment tweets about the research on Twitter, and a YouTube recruitment video was also created and uploaded⁵⁶.

To aid in the recruitment of the younger cohort and reach non-social media users 3000 secondary Schools, colleges and 16+ schools across the UK were emailed using email addresses obtained via a publicly available freedom of information act list with an invitation to participate in the research by sharing the survey and information sheets to students and parents at their institution. Unfortunately, the majority of schools did not respond to the request and many others declined to participate citing that they were not participating in research during the COVID-19 pandemic due to operational challenges, or that due to the timing towards the end of the academic year they would not have time to organise communication about the study. In total n=7 schools responded to express an interest in sharing the survey and were provided with the full details of the survey, a young person's information sheet and parental information sheet to share.

Recruitment materials can be found in [appendix G](#).

⁵⁶ Recruitment video can be seen at: <https://www.youtube.com/watch?v=S0hk47-ouvg>

4.5.5 Ethical considerations of research with under 18s

There is a significant evidence base of literature around dealing with the ethical sensitivities of conducting research with children (those under the age of 18) due to their increased vulnerability (Farrell, 2005; Alderson & Morrow, 2020; Morrow & Richards, 1996; Tisdall, Davis & Gallagher, 2008; Christensen & Prout, 2002; Christensen & James, 2017). Some of the key concerns around research with children and young people are informed consent (Gallagher, Haywood, Jones & Milne, 2010), power dynamics (Hunleath, 2011), and harm reduction.

However, whilst for some time these concerns led to the exclusion of children from research instead using gatekeepers such as parents or teachers to understand children, it is now being recognised that children and young people have a right to participation in research and are able and competent contributors (Christensen & James, 2017; Coyne, 2010; Ennew & Plateau, 2005). In the development of this research the International Charter for Education Research Involving Children⁵⁷, and the British Educational Research Association guidelines (Hammersley & Traianou, 2012) were consulted for guidance. Two key ethical issues were identified around this research: informed consent, and the discussion of sensitive topics, which are discussed below. These discussions focus from a perspective of engaging with minors, although the same need for informed consent and care around discussing sensitive topics was taken with the older 19-24-year-old respondents.

Informed consent

Receiving informed consent from young people aged 13 – 18 is an ethically sensitive dilemma (Alderson & Morrow, 2020; Nijhawan et al., 2013; Abed, 2015; Gallagher, Haywood, Jones & Milne, 2010). Young people under 18 may wish to participate in research and their opinions are important in this research to understand how young people are accessing sexual health information online. Typically, research involving under 18s require parental consent (Nijhawan et al., 2013). In Prior's (2013) youth-

⁵⁷ Available at: <https://childethics.com/wp-content/uploads/2013/10/ERIC-compendium-Charter-section-only.pdf>

centred research discussing gender and sexuality with teenagers under the age of 18, she discussed the problematic nature of requiring parental consent within this context. This stemmed from concern some students expressed about involving their parents, while others “*seemed offended that they had to get their parents’ permission to talk about things that they considered unproblematic*” (Prior, 2013; p.230). Gray (2009) chose to use child consent forms in her research with queer rural youth rather than requiring parental consent as the most ethical option to avoid ‘outing’ the young people to their parents, which could have endangered young people and their safety.

For this research, child consent was selected to best serve the privacy and autonomy of young people. This allowed participation from interested young people who did not want to reveal this to parents for cultural and religious reasons (Patel-Kanwal, 2004) and avoided young people needing to raise the issue with parents if they are uncomfortable doing so. Consent forms were included on the first page of the survey, which Fox et al., (2007) found that was the most convenient way to make the consent process accessible to young people as having them print, post or scan and email consent forms required access to resources they may not have available. Fisher et al., (2016) and Rojas et al., (2008) have also discussed the impact that requiring parental consent has in putting off young people who may be engaging in risk practices (such as drug taking or having sex with members of the same sex) from participating in research, leading to inadvertent biases in data. Although self-consent by adolescents is not frequently used for research, Hein et al., (2015) have suggested in their research on child-consent and understanding that children aged 12 and over are able to make informed consent in clinical research. Additionally, Schwartz (2017) has argued that adolescents from 14 should be able to consent to participation in research due to their ability to consent to in other scenarios without parental consent from that age in the United States (where Schwartz was working). Applying Schwartz’s reasoning to a UK context surrounding this research, young people are able to receive sexual health advice and consent to sexual health treatment and abortion without parental consent under the age of 18 due to Gillick Competency. Prior to the age of 13 this often requires reporting due to safety concerns for young people but from age 13 onwards young people can anonymously access these services if medical professionals are not concerned about exploitation. This means young people are enabled to self-consent provided they have been encouraged to consider discussing this with their parents or

guardians. Therefore, this research used the same principles, with young people encouraged to ask a parent or guardian for advice if they had any concerns about participation in the research and a parental information sheet was also available if they wished to show this to their parents. To ensure that consent provided by young people who do not wish to discuss the research project with their parents is informed, the consent forms were piloted alongside the survey to ensure that the information was clear and easy to understand by the intended audience.

Discussion of sensitive topics

Topics around sex and sexuality can be sensitive subjects for many people, especially young people and those from communities that are culturally or religiously adverse to discussing sex openly (Wong, Macpherson, Vahabi, & Li, 2017; Taragin-Zeller & Kasstan, 2020; Patel-Kanwal, 2004). To avoid participants being made uncomfortable during the online survey, no personal questions about young people's sex lives or sexual experience were included and the research revolved around accessing and sharing sexual health information. All questions in the survey were also made optional, although JISC online surveys has features that can make the answering of questions required, the decision was taken not to utilise this feature to protect the research participants rights not to answer (Baker, 2012).

To ensure that the language used was suitable, questions were developed around validated surveys where possible and the final survey was piloted with young people aged 13-18. Finally, at the end of the survey participants were signposted to a variety of age-appropriate resources to address any issues or questions raised, where they could find further support on the topic, my professional email address was also provided should any respondents have other questions or concerns that needed debriefing. This was deemed essential due to the lack of parental consent, so young people could self-navigate to support and resources.

4.5.6 Online survey analysis

As with the walkthrough method and influencer interviews, reflexive thematic analysis (Braun & Clarke, 2019) was conducted on the qualitative online survey responses using the steps identified in [section 4.3.4](#). However, unlike the process used in the walkthrough method that coded the entire dataset as one, for this process the

responses to each question were coded individually as this allowed identification of patterns and themes in the responses of each question. Responses from the two different aged cohorts were also analysed separately so that comparison could be made between them. I also made the decision to make a note of the number of mentions of each code to recognise patterns in the most common codes for each question. E.g., where a respondent identified multiple answers, e.g. ‘*My friends, the internet (googling information for example) or my sister*’ these were each counted as a mention. This is not part of the process that Braun and Clarke advocate, however it was added to enable to researcher to make clearer comparisons between the responses from the two age groups. In table 10 below is an example of the codes from one question.

| How could your experience of RSE have been improved (13-18-year-olds) | |
|--|--------------------|
| Codes | Number of mentions |
| Teach about pornography | 1 |
| Teach about peer pressure | 1 |
| LGBT content | 3 |
| More inclusive | 1 |
| Sex should be taught as something special not casual | 1 |
| Having lessons in classroom (not online) | 4 |
| More about relationships | 1 |
| Less scaremongering/moralising | 2 |
| Consent/rape/sexual assault | 2 |
| School didn't cover enough | 1 |
| More open and honest | 1 |
| Better prepared/trained educators | 3 |
| Not applicable/haven't done RSE yet | 1 |
| Don't know | 5 |
| Happy with what taught – no improvements needed | 2 |
| More lessons | 4 |
| More information | 4 |
| More relevant information | 3 |
| Single sex classes | 1 |

Table 10 – Example of survey thematic analysis codes

Commonalities were then looked for between these codes to identify broader patterns and themes amongst them. Through the thematic analysis process (as described earlier in [section 4.3.4](#)) these codes eventually became the themes in Table 11 below:

| How could your experience of RSE have been improved (13-18-year-olds) | | | |
|---|------------|--------------------------|--|
| Themes: | | | |
| Honest Information relevant to young people's lives | Don't know | More lessons | More information |
| Better trained educators | Not online | Inclusive LGBTQ+ content | Not applicable – no improvements needed or haven't had RSE yet |

Table 11 – Example of survey thematic analysis themes

As the survey also contained quantitative data this was analysed using the basic analysis tools available in JISC online surveys. The qualitative themes for each question and quantitative analysed data were then brought together into one large document for each cohort in preparation for the writing up stage. During the writing up stage (Step 6 of Braun & Clarke (2019)) the analytic narrative and quantitative data extracts were brought together and contextualised in relation to the research objectives and the overall narrative of the thesis that centres on the assemblage of actors, whilst also making comparisons between the two age cohorts.

4.6 Amalgamating the research findings

The findings from each method of the research were treated as separate datasets and analysed individually using the analysis methods described in this chapter. As each phase of the research design centred on one of the actors in the YouTube sex edutainment assemblage, the findings chapters follow this pattern and are each themed around one of the actors:

Chapter 5 reveals the findings of phase one from the walkthrough method to aid in understanding YouTube's involvement in the assemblage. With the findings then mapped onto the YouTube sex edutainment data web to demonstrate the connections around YouTube.

Chapter 6 shares the findings from phase 2 of the study, with each of the three methods – the health influencer framework, email interviews with influencers, and comment analysis of public response to influencers' existing content – all presented separately through the chapter to build the understanding of Influencers. The chapter then adds to the YouTube sex edutainment data web

with the understandings about influencers garnered from this phase of the study.

Chapter 7 explores the findings from phase 3 of the study about young people gathered through the online survey with the two cohorts of young people and completes the YouTube sex edutainment data web with the mapping of connections around young people.

This allows an in-depth focus on the perspectives of each of the key actors in the YouTube sex edutainment assemblage. Following this the overlapping themes, benefits and issues that had been identified by all the actors were amalgamated through a process of triangulation. To do this I returned to the thematic findings from each phase, observing, comparing them, and looking for the possibilities and problems that appeared across the perspectives of all three actors. These triangulated possibilities and problems then form the discussion chapter ([chapter 8](#)) of the thesis, and the convergence of perspectives have been used to formulate researcher suggestions.

4.7 Impact of COVID-19 on research process

In early 2020 as the COVID-19 pandemic made waves around the globe, it also created a dilemma for collecting participant-centred data using traditional face-to-face methods (Kara & Khoo, 2020a, 2020b, 2020c, 2021). The digital methods selected for this research became invaluable when the UK locked down during the data collection period. Although digital methods had already been selected (as identified in [section 4.1.4](#)), they allowed the research to continue reasonably unhindered as they could be conducted at a distance utilising the internet. However, conducting research in a global pandemic has not been without its challenges, the original plan for recruitment involved utilising schools and community groups to reach a broad range of the younger 13-18-year-old participants, however the COVID-19 pandemic caused schools in the UK to close for large periods of 2020, putting operational challenges on schools which many of the schools who declined participation in this research cited as a reason for non-participation. Finally, COVID-19 has caused emotional challenges for me to navigate due to the national lockdowns and the death of two family members from the virus.

Although the decision was made not to pause PhD studies because of this, it had repercussions on the speed of work and my own mental health.

However, in addition to creating challenges for the research process, the COVID-19 pandemic has also increased awareness, writing and provision of digital methods in academia as universities and researchers adapt to the circumstances created (Kara & Khoo, 2020a, 2020b, 2020c, 2021). Whilst conducting the walkthrough of YouTube, COVID-19 had tangible impacts on the video content being created and promoted, however this also provided interesting context for this study due to a renewed interest in community building online and YouTube's introduction of a learning section on their explore page⁵⁸. The pandemic has developed additional public narratives and interest in internet learning due to the unprecedented closure of schools and need for home schooling in the UK (Bubb & Jones, 2020; Ewing & Vu, 2021). This makes the content of this research, and its importance, even more relevant as young people may have missed their school RSE during school closures and parents and young people may have relied on the alternative resources instead. Finally, COVID-19 has also brought concerns about misinformation online and the role of social media influencers in health messaging to the forefront of public conversation (Li et al., 2020; Knuutila et al., 2020; Brennen et al., 2020; Marchal & Au, 2020), making the findings of this research timely and significant.

4.8 Conclusion

This chapter began by introducing the methodological underpinnings that informed this research in [section 4.1](#), introducing my ontological and epistemological position that led to an interpretivist paradigm being used for this research. The importance of SRHR for understanding why an emphasis has been given to young people's information needs over the perspectives of information gatekeepers was explained, before providing a deeper discussion around Actor-Network Theory's selection to centre this research in the tracing of human and non-human connections between YouTube, influencers and young people. The methodological reasonings for selecting digital methods as they complimented ANT, and the challenges around conducting interdisciplinary research have also been discussed.

⁵⁸ Available at <https://www.youtube.com/feed/explore> (accessed April 2020)

Following this, [section 4.2](#) identified the research study design, the methods selected and how they addressed the research objective through a three-phase study, with each phase focused on one of the three key actors in the YouTube sex edutainment assemblage: YouTube, Influencers and Young People.

The chapter then provided a deeper view of each phase of the research, discussing the methods, recruitment, ethics, and data analysis processes used in each phase of the research. Phase one ([section 4.3](#)) focusing on the interaction with YouTube through the use of the walkthrough method, phase two ([section 4.4](#)) on the interaction with influencers through email interviews with influencers, the analysis of comments on sex edutainment influencer videos, and the development of a health influencer framework, and phase three ([section 4.5](#)) on the interaction with young people through the use of online surveys with young people age 13-18 and 19-24 years. Finally, the impact of the COVID-19 pandemic on the research process has been discussed.

The next 3 chapters will explore the findings identified through the collection and analysis of this data.

Chapter 5 - Findings: Understanding YouTube

5.0 Introduction

This chapter presents the findings from the walkthrough method in the first phase of the research. These findings relate to YouTube as an actor in the assemblage of YouTube sex edutainment and contribute to research objective 1: *'To identify the opportunities and limitations of the YouTube platform for Relationships and Sex Education.'*

This chapter lays out findings that peel away the layers of understanding YouTube; beginning with the brand identity and business model of the platform, then identifying the ways that platform governance is enacted. Following on from this, the features of the platform are identified and interrogated, before identifying the ways that algorithms impact the platform and its functionality with users. These findings lay the groundwork in understanding the suitability and challenges of YouTube as a resource in sexual health learning.

5.1 Understanding YouTube's brand identity and business model

YouTube have developed a strong brand identity since their inception in 2005. The narrative they present, both through their 'about' page and in other descriptions of their platform (such as app store descriptions), focuses on freedom, community, globality and autonomy (YouTube, 2020). YouTube keep their expected audience broad, emphasising a global 'everyone' in their copy, as their mission states: *'We believe that everyone deserves to have a voice, and that the world is a better place when we listen, share and build a community through our stories'* (YouTube, 2020). They further this mission through a series of four 'freedoms' as seen in Figure 16.

Freedom of Expression

We believe that people should be able to speak freely, share opinions, foster open dialogue, and that creative freedom leads to new voices, formats and possibilities.

Freedom of Information

We believe that everyone should have easy, open access to information and that video is a powerful force for education, building understanding and documenting world events, big and small.

Freedom of Opportunity

We believe that everyone should have a chance to be discovered, build a business and succeed on their own terms, and that people – not gatekeepers – decide what's popular.

Freedom to Belong

We believe that everyone should be able to find communities of support, break down barriers, transcend borders and come together around shared interests and passions.

Figure 16 – YouTube vision freedoms

These 'freedoms' give a clear indication of the image YouTube aims to create through their platform, and the value they feel they offer users, presenting themselves as a site of expression and information exchange where users can either professionalise or belong to a digital community.

It is interesting to note that under their 'freedom to belong' YouTube include '*communities of support*' although they provide no additional descriptions of what this might mean. From the perspective of interrogating YouTube for sex education information sharing and community, understanding more about what is meant by 'communities of support' and how these communities manifest is valuable, and this will be explored further in the next chapter. Community is a term that YouTube appear to rely on heavily to develop their brand image, this is interesting as some early literature on YouTube participatory cultures noted that '*YouTube is not designed as a Web space for col-laboration and synchronous interaction.*' (Chau, 2010; p.72). Chau noted that despite what she considered 'primitive' social features, YouTube was still used as a participatory online culture by young people. However, since then, whilst YouTube have not changed the features Chau describes, they have made this participatory ethos of community a part of their call to action for users.

An example of this was noticed during the walkthrough of the platform (phase one, [section 4.3](#)) in their creation of content and advertising around #WithMe in relation to COVID-19. During the COVID-19 pandemic as lockdowns were initiated in various countries across the globe, YouTube began their own campaign encouraging people to stay at home and engage in doing things with others online via their platform e.g.,

do yoga #WithMe, dedicating a sub-section of their explore page to #WithMe and also creating an advert for YouTube that centred around the topic (YouTube, 2021j). The #WithMe campaign aimed to link people who were forced to isolate and encouraged togetherness whilst distancing (YouTube, 2021j). Niu, Bartolome, Mai and Ha (2021) found in their study of #WithMe videos on YouTube that the videos aimed to increase parasocial interaction and ‘sought to de-escalate the mental tension caused by COVID-19’ noting that ‘YouTubers offered friend-like and ‘mentor-like’ provisions’ (p.13), which links with one of the key themes of ‘role models’ identified in the YouTube video comment analysis that will be discussed in [section 6.3.2](#).

YouTube produced an advert on their platform promoting #WithMe which included a variety of YouTube influencers encouraging people to stay home and save lives⁵⁹. The tone of the video was uplifting and included written messages on the screen. In one part of the video the message read ‘*But even when we are apart there are still a million things we can do together...*’ followed by a video clip of prominent YouTuber saying “*I really think that togetherness is the superpower of our species*”. This was followed by fast cut clips of influencers with phrases like ‘*Meditate #WithMe*’ ‘*Exercise #WithMe*’ ‘*Study #WithMe*’ ‘*Craft #WithMe*’ ‘*Paint #WithMe*’ superimposed over clips of them engaging in those activities. The audio from one influencer can be heard over more of these phrases saying “*Why not turn on the camera, do it as a group, do it together*”

⁵⁹ <https://www.youtube.com/watch?v=2IVUDbjfWfE>

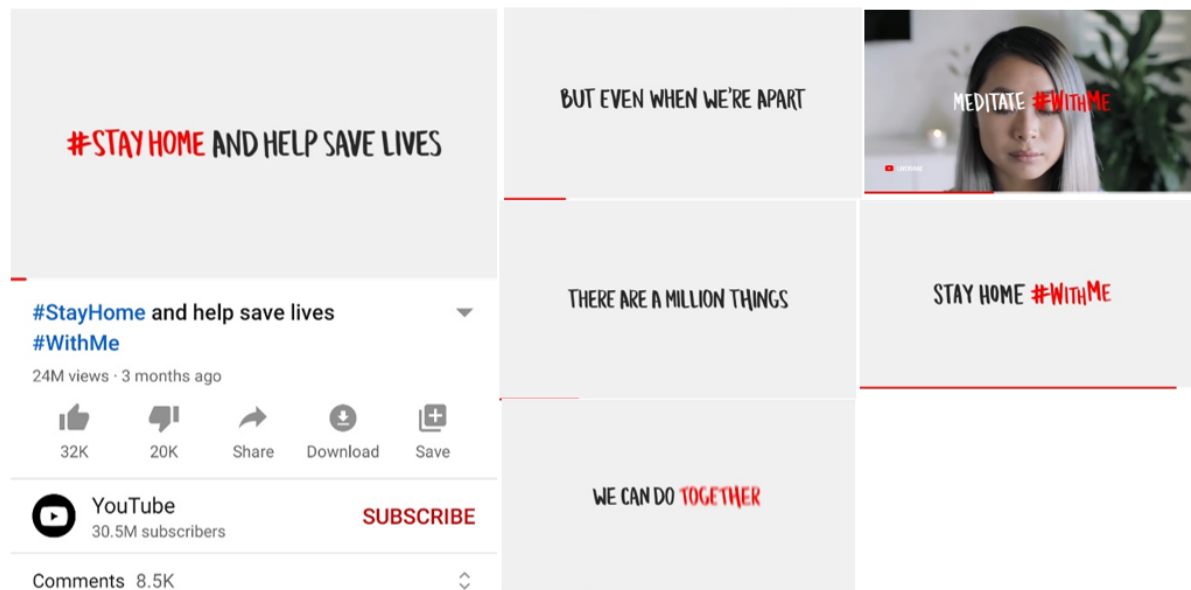


Figure 17 - #WithMe campaign video print screens from <https://www.youtube.com/watch?v=2IVUDbJfWfE>

The campaign was an intelligent business decision as most of YouTube’s revenue is made through advertising. At a time of global financial uncertainty, the ability to drive audience to view adverts, just as many businesses were reducing their advertising, provided an opportunity for YouTube to demonstrate their strength of audience. However, the campaign received mixed responses, receiving 32,000 ‘likes’ but 20,000 ‘dislikes’ in the first 3 months from the video being posted, showing that the content was heavily contested. Some commenters on the video felt that the campaign took advantage of the COVID-19 pandemic for revenue, stating that YouTube had ‘disguised’ an advert as a public health announcement. Others were angered that YouTube were using COVID-19 for an advert when they were demonetising and censoring content related to COVID-19. Yet, the #WithMe video provides insight into the brand image that YouTube are intending to cultivate, one of community that brings people together, while also demonstrating the ways users may resist or disagree with this messaging. Understanding YouTube’s intended image and the way they position themselves aids in understanding their choices later in this chapter when it comes to platform features and the ways YouTube choose to enact governance to preserve this image, and these features and acts of governance have direct impact on the ability to share sex edutainment content on the platform.

Returning to the four freedoms that make up their brand identity (seen previously in figure 16), YouTube’s focus on ‘freedom of opportunity’ develops beyond branding and

can be viewed across the platform, as both the YouTube Creator academy and YouTube for Artists sections promote the idea of using YouTube professionally and upscaling on the platform. YouTube rolled out their YouTube partner programme which allows content creators to monetise their YouTube videos in 2007, and since then have encouraged users to become creators, which some have used to become influencers and full time 'YouTubers' with their own celebrity status (Cunningham & Craig, 2017). Exploring the Creator Academy gives us an opportunity to consider YouTube's envisioned ideal scenarios of use and the image projected to users who wish to create video content on the site. The Creator Academy is a separate part of the YouTube website which provides YouTube creators with advice and tools for building their channel⁶⁰.

On first visit to the creator academy the user is presented with three 'basics' lessons for developing their channel. The first, a quick start guide to YouTube, is represented with a red icon featuring a rocket. This comes with connotations of launching oneself, the way many YouTube influencers have 'launched' a career with YouTube. The next lesson is titled 'Get discovered' and features a pair of binoculars as an icon. Although the guide is related to enhancing search potential, the use of the phrase 'get discovered' implies more than just being found on a site search as culturally the phrase 'get discovered' links with ideas of finding fame. The final basics lesson that appears initially on the page is a segment called 'Earn money with ads on YouTube'. This segment is accompanied by an icon featuring money in a design reminiscent of a stack of dollar bills, encouraging users towards monetisation and earning money from their channel. The themes of these lessons indicate how YouTube envision use of their platform. There is a subtle underlying message that creating YouTube content may lead to fame and fortune, however this is not stated directly, but whispered through design and copy choices that encourage an upscaling of amateur creators to professionalise themselves.

The reason YouTube encourage amateur users to professionalise into paid creators can be understood by delving deeper into the YouTube business model. YouTube is owned by the Google parent company Alphabet and YouTube revenue has continued

⁶⁰ https://creatoracademy.youtube.com/page/home?utm_source=YouTube&utm_medium=YT%20Main&utm_campaign=YT%20Appsn

to increase over the last 4 years, reaching \$19.7 Billion USD in 2020, up from \$15.1 Billion USD in 2019, \$11.1 Billion USD in 2018 and \$8.1 Billion USD in 2017, making YouTube the fastest growing asset Alphabet owns (Business of Apps, 2021). YouTube's largest revenue driver is advertising – YouTube sells advertising based on their machine learning ability to identify suitable users to advertise to, based on a variety of data points about them – although additional income is earned through YouTube's other paid services such as YouTube Premium, YouTube Music, and YouTube TV (Business of Apps, 2021). YouTube ventures also include YouTube Go, YouTube Kids, YouTube Originals, and YouTube Music (Business of Apps, 2021).

The focus on advertising can be seen throughout the platform in design and feature choices. For example, when viewing the YouTube website, the page design draws users' eyes straight to video content over the sign-up process. The visual elements of the YouTube website, such as icons and search bars are neatly arranged around the top and left-hand bar, however these are predominantly neutral black and white colours, leaving the colour and vibrance of the moving video previews to draw the attention of the user, encouraging them to engage with the content straight away. On the app interface during the walkthrough, it was not immediately clear while scrolling which icons were adverts and which were videos as on-page adverts have been given the same dimension as video content and almost all were moving adverts simulating the impression of a video. The walkthrough identified adverts featured in multiple places from playing directly before a video (including short adverts could not be skipped and longer adverts with a minimum play period before they could be skipped), to banners below the video and in other side bar locations. These adverts use browsing cookies to link to the users past browsing history to the advertising content they see, however, during the imagined user walkthrough where an account with a date of birth of a 15-year-old, a pop up appeared stating that personalised adverts had been suspended as YouTube could not be sure the user was over 18, highlighting that YouTube have some protections in place for younger users.

The YouTube advertising revenue model can impact how YouTube steer content creators with the direction of content they produce for the site. In 2013 YouTube produced a blog for creators titled "*Create family-friendly content that advertisers want to sponsor*" which highlighted that some advertisers did not want their adverts

appearing alongside “*content containing profanity, offensive, or derogatory language/images*” (YouTube Creator Blog, 2013). This supports Burgess, Green and Rebane’s (2020) acknowledgements that while YouTube supports users to create content, YouTube’s ‘patronage’ comes with conditions; ‘*YouTube INC can be seen as the ‘patron’ of collective creativity, inviting the participation of a wide range of content creators, and in so doing controlling at least some of the conditions under which creative content is produced*’ (p.106).

In this way the business-needs of the corporation can shape the creation of content on the platform. This is specifically relevant in the case of sex education content, as content related to sex may not be considered ‘*family-friendly*’ and thus may find itself demonetised, which will be explored in the next section. YouTube, whilst being a publicly accessible social media platform with a brand identity of freedom, opportunity, information and belonging, is ultimately a for-profit business that drives advertising.

The findings in this section around YouTube’s brand identity and revenue model link to Gillespie’s (2010) observation that social media providers take advantage of the participatory ethos of the web to utilise the information users volunteer about themselves. More than a decade later, Gillespie’s assertion of YouTube that: ‘*This is increasingly, perhaps always was, a ‘platform’ from which to sell, not just to speak.*’ (Gillespie, 2010; p.354) still rings true with the findings of the walkthrough method. In interrogating YouTube’s suitability for sex education information dissemination, it is important to recognise that signposting young people to YouTube to access this content involves driving them towards a space where they are advertised to. Young people may be more vulnerable to this advertising (Pechmann, Levine, Loughlin & Leslie, 2005), therefore understanding the perspectives of young people and how they navigate social media to access sexual health information will be assessed in [chapter 7](#).

5.2 Understanding YouTube’s platform governance

Online platforms and the communities that form within them are subject to governance in various forms, whether moderation, platform policies, community guidelines, or terms of service (Gillespie, 2017). These policies and practices are often required to

ensure that the congregation of strangers in an online space remains harmonious. YouTube utilise various forms of governance in the form of community guidelines, terms of service and flagging and reporting procedures in an attempt to create a cohesive online space. However, how do these policies and structures of governance affect users of the platform, and impact the suitability of YouTube for sex education?

YouTube's community guidelines apply to all types of content on the platform including videos, comments, livestreams, links and thumbnails. YouTube state the guidelines are evaluated regularly in consultation with experts and YouTube creators '*to keep pace with emerging challenges*' (YouTube, 2021a). These guidelines are enforced on the platform using a combination of user flagging practices, human reviewers and machine learning (YouTube, 2021i). YouTube emphasise that they '*apply [the guidelines] to everyone equally – regardless of the subject or the creator's background, political viewpoint, position or affiliation*' (YouTube, 2021a). Those that violate the policies laid out in the community guidelines will have content removed, with a system to avoid repeat offenses that gives users an initial warning with no penalty before applying a three strikes rule within a 90-day period that can lead to a channel being terminated (YouTube, 2021b). YouTube also reserve the right to terminate a channel or account after a single case of severe abuse or if a channel is dedicated to a policy violation (YouTube, 2021b).

YouTube’s community guidelines cover the following categories and sub-categories:

| Spam and deceptive practices | | | | | |
|-------------------------------------|------------------------------|--|-------------------------------------|---------------------------------|---------------------|
| Fake engagement | Impersonation | External links | Spam, deceptive practices and scams | Playlists | Additional policies |
| Sensitive content | | | | | |
| Child safety | Thumbnails | Nudity and sexual content | | Suicide and self-injury | Vulgar language |
| Violent or dangerous content | | | | | |
| Harassment and cyberbullying | Harmful or dangerous content | Hate speech | Violent criminal organisations | Violent or graphic content | |
| Regulated goods | | | | | |
| Firearms | | Sale of illegal or regulated goods or services | | | |
| Misinformation | | | | | |
| Misinformation | | Election misinformation | | COVID-19 medical misinformation | |

Table 12 - YouTube community guidelines categories and subcategories

Several of these subcategories are valuable for deconstructing the suitability of YouTube for sex education with young people, particularly the community guidelines for Child safety, Nudity and sexual content, Harassment and cyberbullying, and COVID-19 medical misinformation. For most categories of their community guidelines YouTube provide a short, illustrated video to explain the highlights of the policy⁶¹, and further written guidelines involving examples of prohibited content.

Child safety policies relate to young people under 18. YouTube allows users over the age of 13 to have an account but recommends that young people have parental permission up until the age of 18. Many younger children do use YouTube via accounts created by their parents using the YouTube Kids app (where parent-managed accounts can be created for children between the ages of 4-12 years) that provides a contained child-friendly environment for younger children to use YouTube where parents have additional controls. For this reason, YouTube have a child safety policy for the protection of minors. YouTube define a minor as anyone under 18-years-old (YouTube, 2021c). The child safety policy aims to protect children from accessing dangerous, misleading, or inaccurate content, and ensures that images of children

⁶¹ Examples can be seen in the two links below:
https://support.google.com/youtube/answer/2801999?hl=en&ref_topic=9282679
https://support.google.com/youtube/answer/2802002?hl=en&ref_topic=9282679

posted on the platform are appropriate and do not encourage unsafe behaviours. In relation to content related to sex, YouTube state *'Content that targets young minors and families but contains sexual themes, violence, obscene, or other mature themes not suitable for young audiences, is not allowed on YouTube'* (YouTube, 2021d). However, there is no mention of older minors in relation to this policy and no definition of 'sexual themes' is provided. However, much of the policy draws a line between content posted with the intention of being sexually gratifying, and content that is educational, entertaining, and so on. For example, nudity is permitted on YouTube if used for educational purposes, however sexual content intended to be sexually gratifying contravenes the nudity and sexual content policy.⁶² This is likely because, as Paasonen, Jarrett and Light (2019) have noted, social media platforms often conflate sexual content with risk and enact governance and flagging without nuanced consideration to context or consent.

YouTube withhold the right to age-restrict videos if they include sexual content or nudity but do not directly break the policies. YouTube use the following guidelines when making decisions about age restrictions:

'Whether breasts, buttocks or genitals (clothed or unclothed) are the focal point of the video
Whether the subject is depicted in a pose that is intended to sexually arouse the viewer
Whether the language used in the video is graphic or lewd
Whether the subject's actions in the video invite sexual activity, such as by kissing, provocative dancing, or fondling
Whether the clothing would be generally unacceptable in public contexts, such as lingerie
Whether sexual imagery or audio has been blurred, masked, or obscured
Whether sexual imagery or audio is fleeting or prolonged in the content
Whether the content invites others to participate in a challenge involving sexual acts.'

Figure 18 - YouTube sexual content policy

⁶² This raises questions on if and how algorithms are able to understand the nuance between arousing and educational content, which will be discussed in more detail as algorithms are interrogated later in this chapter in section 5.4.

Considering the features of YouTube sex edutainment content are educational and do not contravene these policies and guidelines, this should make YouTube a suitable platform for hosting such content. However, in practice there may be challenges with how sex education content is interpreted on the site. Whilst conducting the walkthrough of YouTube using a profile created with a date of birth for a 15-year-old, a search was made of a question young people may have about sexuality: *'is masturbation wrong?'*. The first recommended video titled *'is masturbation a sin?'* was by a YouTube sex edutainment influencer and accredited sex educator whose videos have been analysed in the next chapter. Yet, clicking on the video triggered an age restriction rendering the content unviewable, meanwhile other videos on the same topic were not age restricted. Reviewing the video later (from an account with an adult date of birth) the content does not appear to contravene any of the YouTube policies around sexual content, however it may have triggered an algorithmic response and been restricted, or if users find content they believe violates YouTube policies they are encouraged to report it through the act of 'flagging'. Due to YouTube's use of user flagging practices, it is possible that a user has viewed the video, disliked it, and reported it for containing sexual content. As YouTube uses machine learning this may then have been upheld by the algorithm. Furthermore, whilst updating the walkthrough in July 2021 all 22 of the videos that were used for the comment analysis in phase 2 step 2 ([section 4.4.2](#)) were searched for whilst in the restricted mode that impacts users under 18⁶³ from viewing content that may be inappropriate. None of the 22 videos could be viewed in restricted mode, meaning that this content, despite being educational, is inaccessible to anyone aged 13-18-years-old. Some other videos by the 8 influencers who created the videos were available in restricted mode, however the age limit removed the majority of their content.

An interesting note is that comparing this to the comment data collected from the 22 videos, it is possible to see that not all the videos automatically flagged as restricted, as several commenters posted celebratory comments on one video about the video not being age restricted around the time it was first posted. Therefore, this video may have been flagged later by a user. This finding from the walkthrough raises significant challenges for considering YouTube for sex education content dissemination with

⁶³ and those without accounts, as their age cannot be verified as over 18.

young people under 18. If content created by professionals and designed to be appropriate for young people aged 13+ is regularly flagged and restricted by YouTube, this is a challenge that public health organisations and Sex edutainment influencers using the platform may find problematic, limiting the potential of this resource with a group who may find it helpful for their sexual health learning.

In addition to child safety and sexual content, YouTube also have stringent policies around harassment on the platform, with the intention of keeping both users and content creators safe. The harassment policy focuses predominantly on online abuse towards content creators or people with protected characteristics, however features limited advice on harassment between users in the comments, although the webpage for harassment community guidelines states: *'This policy applies to videos, video descriptions, comments, live streams, and any other YouTube product or feature'* (YouTube, 2021f) and emphasises that it is a policy violation to direct users towards another YouTuber's comment section for the purpose of harassment and malicious abuse. Understanding YouTube's attitude to harassment is crucial in identifying if the platform is a safe place to direct minors for information, as the suitability of the overall online environment for potentially vulnerable young people is just as important as the suitability of the video content posted.

Another area of YouTube policy that has been developed since 2020 is guidance around COVID-19 communication. This is relevant to this research as this is the first YouTube policy to take a stance on the sharing of health information on their platform and establish rules and guidelines to limit the spread of health misinformation (YouTube, 2021g). Unlike the other community guidelines which have been produced in bitesize chunks, the COVID-19 guidance is detailed and highly specific. YouTube have made misinformation about treatment, prevention, diagnostics, transmission, social distancing and isolation forbidden, alongside content that denies the existence of COVID-19 (YouTube, 2021g). YouTube have taken a strong position against misinformation and content that disputes the efficacy of local health authorities' or the World Health Organisation's guidance. However, whilst observing the #WithMe campaign video, it was noted that in the comments on the video there were a number of comments from people who felt that YouTube were enacting unfair censorship by demonetising content about COVID-19 and restricting content that went against World

Health Organisation recommendations. Commenters deemed this level of interference from YouTube as being a '*fascist technocracy*', calling the platform '*the censorship machine*'. Yet, from a public health standpoint, given the unprecedented level of misinformation and conspiracy that was spread about COVID-19 during the pandemic, YouTube's actions are arguably necessary.

In addition to creating a specialised set of community guidelines around COVID-19 information, YouTube have also employed machine learning to auto-identify content related to COVID-19 and created links to reputable local health information sources, such as the NHS, in a blue information bar, as can be seen in figures 19 and 20 below.

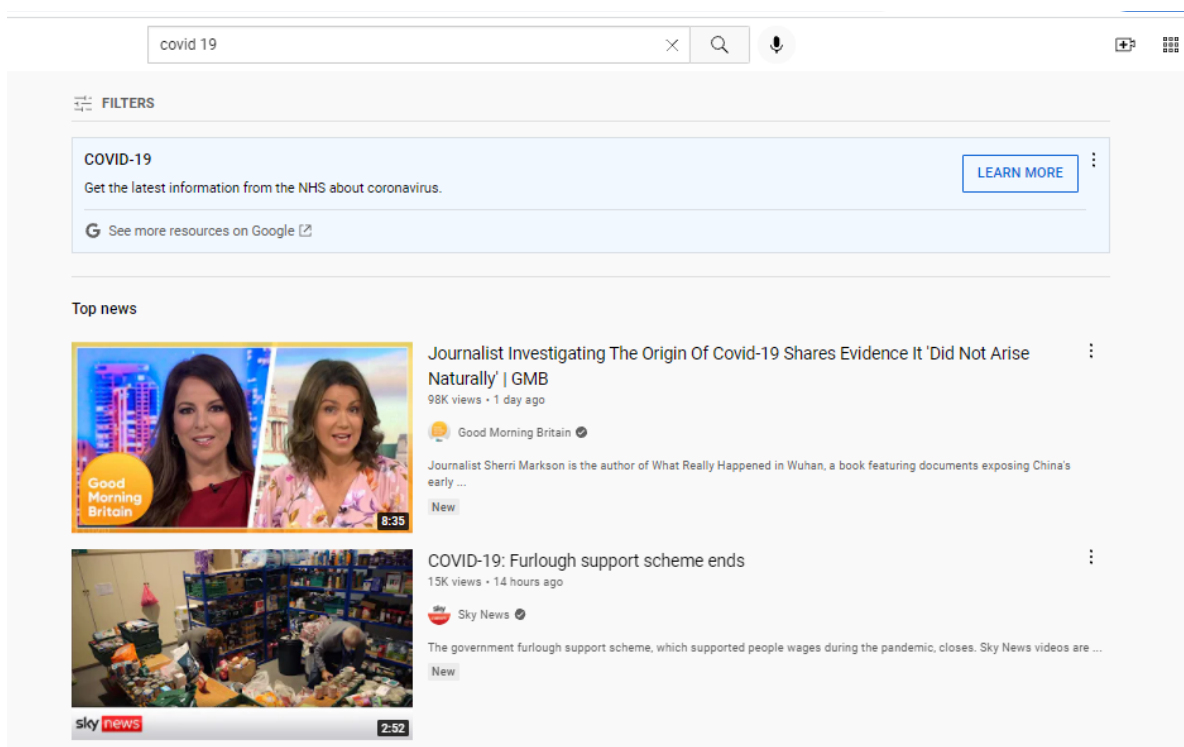


Figure 19 – COVID-19 automated blue bar below a search for 'covid 19'



Figure 20 - COVID-19 auto-identified blue bar below a video.

It is not clear when YouTube introduced this feature, although it appears to have come into effect around July 2021, not long before the updated walkthrough was conducted according to media articles (Elias, 2021, July 19; Currin, 2021, August 27) however Currin suggests that its introduction was based on research from Kington et al., (2021) on identifying credible sources of health information in social media. This form of platform governance is of interest when considering YouTube's use for sex education. One key concern identified in chapter 3 around YouTube for learning is the potential for misinformation as anyone can create and post health information regardless of training. The introduction of this machine learning feature to identify content related to COVID-19 provides an insight into potential ways YouTube can challenge misinformation around sexual health and provide direct links to public health organisation content. At the time of writing the auto-identification system to prevent health misinformation has not been applied to the majority of health topics or videos, however it has already been put to use on content about HIV (see figure 21 below), likely due to the large amount of misunderstanding about the virus.

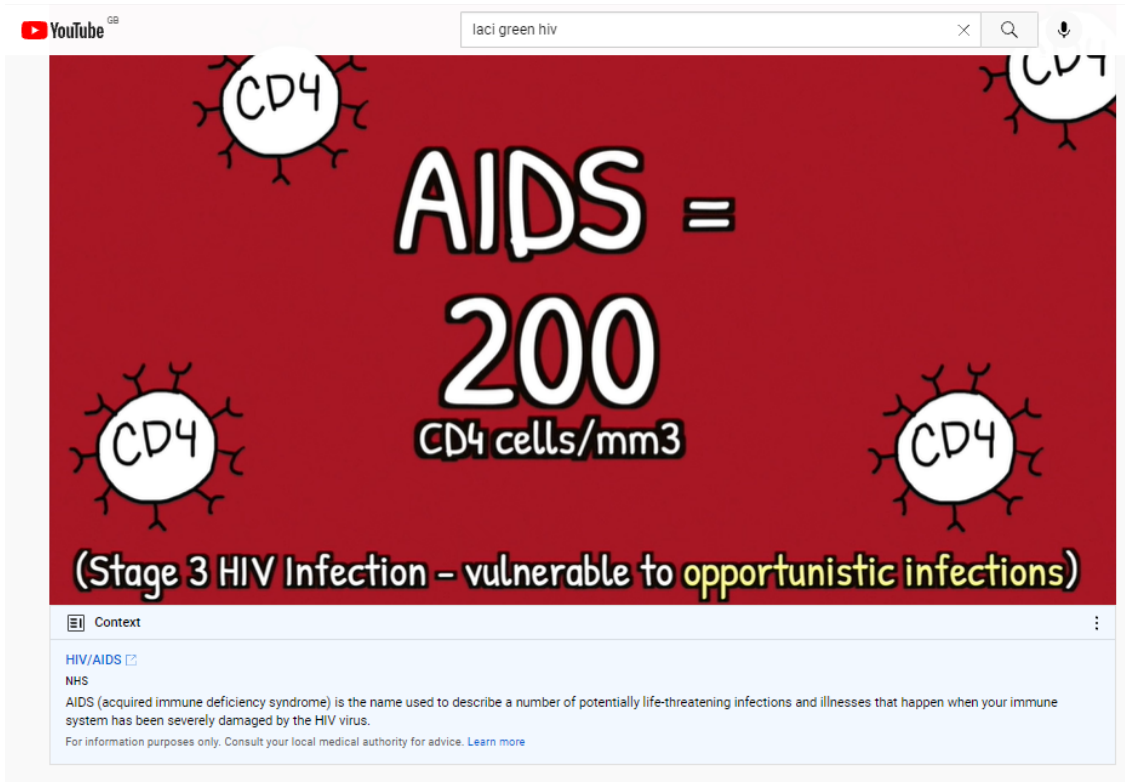


Figure 21 – HIV auto-identified information box about HIV linking to the NHS below a video by Laci Green on HIV/AIDS

This identifies that YouTube's guidance and policy around COVID-19 information is beginning to be applied across a broader series of health contexts. In January 2021 YouTube announced the creation of a Health Partnerships team to 'address the evolving digital health needs of consumers and continue connecting people with credible health information' (YouTube, 2021h). At present it appears that a focus will be made on bringing credible health information to the forefront on the platform and making links with respected health organisations and health professionals. This is of interest to this study as it may mean future moves towards increasing health content, such as sexual health content on the platform. The move towards credibility of YouTube health content could also have impacts on either raising the profile of this form of sex education content or limit it in favour of content produced by health organisations, future research will be required to understand these impacts.

5.3 Understanding YouTube's features

The individual features of a social media platform affect day-to-day use, and in the case of this research, the suitability for adopting them for additional uses such as sex education with young people. The walkthrough of YouTube identified several features that are of note in understanding the platform's potential for sexual health information dissemination. One of the key features of social media platforms are their accessibility⁶⁴. YouTube is a global platform and promote that audiences can '*Watch on any device*' as the app can be accessed on phones, tablets and smart televisions, and the YouTube website can be accessed on all internet-compatible devices, users can also 'cast' their screen onto their television or a connected device such as an Amazon fire stick or Google Chrome cast. This makes YouTube accessible to young people across a wide range of internet-enabled devices, however the platform requires internet access therefore those experiencing internet poverty may struggle to view content. Even if young people experiencing internet poverty have access to the internet in a school environment, some schools put blockers against YouTube to prevent students accessing the website (Snelson, 2018), likewise, the closure of schools and move to remote online learning due to the COVID-19 pandemic highlighted concerns about a digital divide in internet access and its effects on young people (Coleman, 2021). Therefore, while YouTube proudly proclaim that they have 2 billion monthly logged in users across the world, YouTube sex edutainment may not be accessible for those with limited access to a device or internet connection.

Users on the website do not need to be signed in to view content unless the content is age restricted but are encouraged to 'sign in' to access additional features such as commenting, liking, favouriting and subscribing. On the app users must be signed in with a google account immediately upon downloading the app, as YouTube is owned by Google's parent company Alphabet. This means that users must have a google account or create one to use the app. The encouragement for signing up may support the gathering of user data for advertising. Subscription to channels is an important part of YouTube's business model. Although subscribing to channels is free, it allows users

⁶⁴ Whilst 'accessibility' can be used to denote suitability for use by people with audio, visual or physical impairments, in this case, and in later use within this thesis, accessibility is used to mean easy to use, reach, and understand, or the quality of being obtainable.

to be notified when their favourite channels have posted a new video, drawing them back into the app where they will be consuming more advertising. Subscribing to channels is central to YouTube's intention of community building by uniting users around hobbies, interests, and fandom to have them regularly engaging with the platform.

Returning to YouTube's platform features, YouTube contains many common conventions of a social media platform, including the ability to 'like' or 'dislike' a video using thumbs up and thumbs down buttons, follow accounts (or 'channels') of interest, save videos and comment on content with reactions and opinions⁶⁵. In addition, users are able to share content using integration features that allow the YouTube video to be posted to other platforms including WhatsApp, Facebook, Twitter, email, Reddit, Pinterest and Tumblr, in addition the video link can be copied for dispersing in alternative ways.

One feature that is of interest to this research is commenting on videos, which gives users the opportunity to debate content, bond over shared opinions and provide their own views on the videos they engage with on YouTube. This is a crucial way that YouTube develop their freedom of belonging through the opportunity to create online communities⁶⁶. During the walkthrough while observing generic features of videos and content, the comments on a video of an emotive audition from a famous television singing contest were noted to contain examples of the way communities were able to form in the comments. The video featured a young woman explaining that she had written a song about her ex-boyfriend. At the top of the comments section the video poster had 'pinned' their own comment as the first comment viewed that asked if other users felt the same way as the heartbroken girl. In the comments some users commented on the talent of the singer, others made philosophical statements about love, and some used this as a catalyst to share about their own experiences of heartbreak. On one comment where the user shared an opinion about heartbreak, a number of other users replied sharing their own experiences of heartbreak and their

⁶⁵ Video creators can choose to disallow comments from being made on their videos, which one of the influencers interviewed in section 6.2.2 of the next chapter discusses.

⁶⁶ Although it is interesting to note that Burgess, Green and Rebane (2020) have argued that YouTube were late to introduce these features, and that such community tools were '*added almost as an afterthought, long after the community themselves have created solutions*' (p.114), emphasising that YouTube co-opted the community that had developed organically on their platform, rather than nurturing from the platform's inception.

lessons in love. In this way the comments may build community between strangers through their expression of shared experience. This observation supports Lange's (2019) anthropological study of YouTube video sharing, where interview participants '*believed that even non-video-making activities such as commenting were community-building*' (p.5). YouTube aim to enforce the positive interaction between users by posting a link to their community guidelines with a note '*Remember to keep comments respectful and follow our community guidelines.*' and as comments on YouTube videos are public and visible to all on the site the comment box features the text '*Add a public comment...*' to remind users of the public nature of what they post. An in-depth analysis of the comments on YouTube sex edutainment videos can be found in [section 6.3](#).

However, one feature common among other social media platforms that YouTube does not enable is direct messaging to send private messages to the inbox of another user. This feature was previously available but was removed in 2019 as YouTube chose to focus on the public forms of interaction such as comments, likes and 'stories' (a short burst of content that is only visible for 24 hours). While YouTube has an inbox feature this is for notifications from channels to which the user is subscribed. Therefore, if a YouTube influencer wishes to engage with their community of fans they can do this only through the video comments, or through the direct messaging options supplied on alternative social media platforms they use. YouTube's choice to remove the option of direct messaging in some ways contradicts their focus on community, however YouTube stated that this decision was made to encourage, and focus on, public conversations and discussions (YouTube Help, 2019).

Another potential reason that direct messaging may no longer be prioritised on the platform is because YouTube appears to encourage audiences, originating back to their original branding call to action of 'broadcast yourself' (Burgess, Green & Rebane, 2020; Burgess & Green, 2018; Jarrett, 2008). While platforms like Facebook are based around friendships and mutual connections (Papacharissi, 2009), YouTube and Instagram appear to use a different model. On Facebook users add someone as a friend and must be accepted to mutually engage with each other's content, whereas YouTube and Instagram users can 'subscribe' or 'follow' another user with no reciprocation or permission required.⁶⁷ This appears to encourage creating an

⁶⁷ Although users can change their settings to require permission if they wish their accounts to be private.

audience or following, as can be seen in the language choices used on these platforms; on Instagram users 'follow' an account they like and become 'followers'. YouTube users 'subscribe' to a 'channel' to have the content from that channel reach them easily and become 'subscribers'. In both cases the person you are following or subscribing to does not see anything you post – it is a one-way exchange that mirrors a fan relationship rather than a friendship.

In terms of sexual health learning, YouTube has a series of features which are of interest. YouTube allow users to both clear their 'watch history' or pause watch history. This allows users to hide the history of their searches and viewed content from their YouTube history, often with the view to privacy. Privacy features such as these may be valuable to young people searching for sex education content who do not want family members to see what they have viewed, or to have their viewing impact the recommendations that appear on their YouTube home page. YouTube also offer an 'incognito' mode that allow users to have activity from their session be automatically cleared. These features may be valuable for young people wishing to view content on a shared family computer or who are concerned about searching for sex and relationships related content and having their search histories viewed later. However, age restricted videos are not available in incognito mode as the user is required to sign into an account to verify their age, this means that this feature may not be practical for under 18s who wish to use the incognito mode feature to gain additional privacy for sex and relationships content if that content is age restricted.

5.4 Understanding YouTube's algorithms

As discussed in [section 3.5](#), it is impossible to interrogate YouTube without considering the role of algorithms in the features of YouTube. A user's YouTube experience starts with the 'home' page that features 'recommended' videos. During the walkthrough, upon starting with a brand-new account it was interesting to interrogate the algorithm and the assumptions it makes. Observing the recommended videos on the home page, the user is not alerted to why these are recommended, the videos were not all current and ranged from being posted between 17 hours ago and three years ago. Assessing the recommended videos categories provides insight into the assumed age of users. The 8 initial recommended videos were presented on the home page included 3 from

Gaming related channels, one titled 'questions you're too afraid to ask your mum', a Dance Moms video, an unboxing video of the latest iPad and a comedy video about Tinder. The content of these videos suggests that the assumed user of YouTube is likely to be teenager or a young adult into their 20s, as none of this content appeared to specifically target the 30+ or 40+ user, although the content was not limited to the interests of a younger age group. From these initial assumptions the algorithm builds up a picture of the user's interests to personalise content to them and decide 'what matters' (Gillespie, 2014). In the creator academy guide, YouTube provide content creators with details of what influences their algorithms, emphasising that the algorithm doesn't penalise creators but instead focuses on known data about the individual user based on:

- *What they watch*
- *What they don't watch*
- *How much time they spend watching*
- *Likes and dislikes*
- *'Not interested' feedback* (YouTube Help, 2021)

Algorithms not only influence the recommended videos for each user, but also the 'trending' videos that are new and popular on YouTube in a viewer's country. The icon for the trending page is a flame implying that these videos are what is currently 'hot'. This algorithm is influenced by '*view count (especially the rate of growth in views), where views are coming from, and many other signals. Therefore, the video with the highest daily view count may not necessarily be #1 on Trending*' (YouTube help, 2021) although Covington, Adams and Sargin (2016) have detailed how YouTube uses a complex deep learning process of machine learning to keep up with the large-scale demands created by the size of the YouTube platform.

Other areas where algorithms could be seen in action were sections on the home page that featured additional videos related to current trending world news, such as a dedicated area on videos related to COVID-19. In the walkthrough all of the videos in this section were localised to the UK where I was accessing the website, showing an example of how the algorithm sorts content based on knowledge of the users location.

These examples show how user experience of YouTube is driven by algorithmically suggested videos, each user's experience of YouTube is therefore unique, however this affects the information they have access to, the findings of their searches and could possibly lead to inequality in information access (Graham, 2004; Turow 2006). YouTube state in their creator academy that the search function algorithm is impacted by: *'variety of factors including how well the title, description, and video content match the viewer's query. Beyond that, we look at which videos have driven the most engagement for a query. Search results are not a list of the most-viewed videos for a given query'* (YouTube help, 2021). The use of videos that have driven the most engagement for a query may also mean that the algorithm inadvertently privileges videos with 'clickbait' titles or images (features that pique the interest of the searcher to click that may be slightly misleading) however the additional factors described may mitigate this likelihood. Despite knowing the importance of algorithms in sorting information and guiding users, very little is known about the specifics of the YouTube algorithm, other than its reliance on machine learning and developer input, which makes it challenging to understand the ways the algorithm may privilege or disadvantage sex and relationships content or certain terms.

Algorithms and machine learning are also used in the enactment of platform governance. YouTube state: *'we use a combination of people and machine learning to detect problematic content at scale'* (YouTube, 2021j), however, this approach leans heavily on algorithmic machine learning as of the 6,229,882 videos removed from YouTube between July 2021 – September 2021 only 328,641 were not removed by automated flagging (Google, 2021). This means that an overwhelming majority of removed videos are flagged by algorithms, and although YouTube state there is a human element to reviewing, it is not made clear what percentage of algorithmically flagged videos are then reviewed in person or reinstated having been reviewed. Furthermore, YouTube have stated that as a result of the COVID-19 pandemic and reducing staff's contact hours:

"we are temporarily relying more on technology to help with some of the work normally done by human reviewers, which means we are removing more content that may not be violative of our policies. This [...] will likely continue to impact metrics moving forward" (Google, 2021)

Yet, despite this, as noted earlier in this thesis, Knuutila et al., (2020) found that it took an average of 41 days to remove the COVID-19 misinformation videos identified in their study.

In addition, leaning on technology, whilst understandable and necessary to manage the number of videos uploaded to the platform, raises some challenges for YouTube sex edutainment. Specifically, a reliance on technology may lose the human discretion (Graham, 2004) to recognise the nuance of difference between content that is designed to be sexually arousing, and educational content about sex. This mirrors concerns raised by Schmitt, Rieger, Rutkowski and Ernst (2018) on how YouTube algorithms caused challenges for terrorist extremism prevention campaigns by misunderstanding the nuance between promotion and prevention content. However, algorithmic blocking of content also has some benefits in considering YouTube as a suitable learning ecology for young people. When young people, especially those aged under 18, embark upon self-directed learning around topics related to relationships and sex, there is the concern they may be exposed to inappropriate or distressing content, or at risk in online environments. Yet, well-enacted governance may aid in creating safer virtual spaces, for example, the most common reason for content removal between July 2021 – September 2021 was contravening the child safety policy, with 31.9% of removed videos being deleted from YouTube for this reason, and a further 18.4% removed for nudity and sexual content (Google, 2021). Content moderation is not inherently negative and is essential to the management of safe virtual communities, as *'an almost obligatory step for social media [...] to prevent that their digital spaces turn into hostile environments for users due to the spread for example, of incitement to hatred.'* (Di Gregorio, 2020; 2), however in the case of YouTube sex edutainment and algorithmic sorting, it may also inadvertently restrict content that does not contravene policy and limit valuable educational content. Perez (2021) suggests this is because *'Sexual health content is often flagged as pornography by Big Tech, and consequently, such material is automatically banned'* (p.2).

Therefore, future interventions utilising YouTube sex edutainment and further development of YouTube as a sexual health learning ecology will likely need to pay closer attention to the role of algorithms and their effects as both a benefit and a hinderance to sex education.

5.5 Conclusion

This chapter has extrapolated the findings from the walkthrough method to improve understandings of YouTube as the environment where YouTube sex edutainment takes place and the financial, governance and algorithmic structures that impact platform use.

The key findings from this chapter are:

- YouTube has built a strong brand identity around community, bolstered by the sharing features built into the platform that allow YouTube content to be shared beyond the platform. These features may be useful for building parasocial relationships and the sharing of sex education content.
- YouTube is a widely used platform, available on a variety of devices, and can be accessed both with and without a YouTube account, making it accessible to a large audience.
- Age restrictions for under 18s may be a significant setback for the use of YouTube for sexual learning.
- YouTube's operating model is driven primarily through advertising, and YouTube users are encouraged to become a part of this by monetising their channels and professionalising on the platform.
- The governance enacted on YouTube may be problematic for the sharing of sex and relationships content, particularly due to its enforcement through algorithmic sorting which may lack nuance to understand the difference between sexual content and educational content relating to sex and relationships.

Through the analysis of the walkthrough content data of YouTube we can see in figure 22 below how this begins to populate the actor network theory data web.

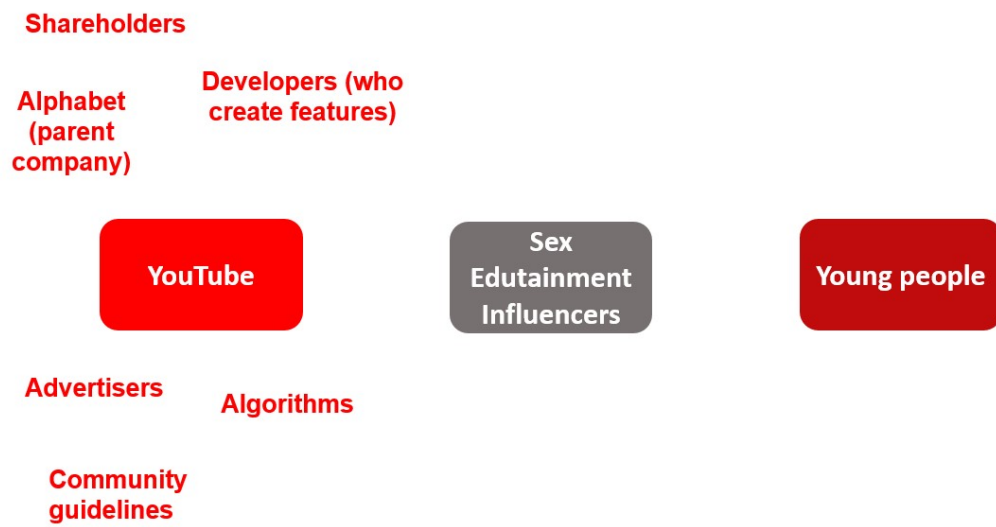


Figure 22 - ANT Data web stage 1

The next chapter will interrogate the data collected relating to Influencers, their role in sex edutainment and the public response to their content to further develop our understandings of the assemblage of YouTube sex edutainment.

Chapter 6 – Findings: Understanding Influencers

6.0 Introduction

Having identified some of the opportunities and limitations of the YouTube platform in [chapter 5](#), this chapter focuses on the findings related to influencers and their role in the YouTube sex edutainment assemblage. The findings in this chapter are developed from phase two of the research through the development of the health influencer framework, email interviews with YouTube sex edutainment influencers, and analysis of public comments on n=22 YouTube sex edutainment videos.

Together these findings contribute to the following research objectives:

- 2) To understand how social media influencers fit within a spectrum of health influence
- 3) To understand the views and role of sex edutainment influencers and how partnerships could be developed with them
- 4) To identify what public comments on influencer sex edutainment videos reveal about networks between influencers and audiences

This chapter will begin by introducing the health influencer framework and the findings garnered from its production in understanding social media influencers health influence. The chapter will then explore the views of the sex edutainment influencers who responded to the email interview (n=3), building an understanding of their audience relationships and how contact with them is managed, their training, any challenges they experience using YouTube as a platform to disseminate sexual health learning, and their experience of, and interest in, partnering with public health organisations.

Finally, the chapter will share the results from the comment analysis of the public response to existing YouTube sex edutainment influencer videos and the key themes they revealed.

6.1 Understanding health influence

As the systematic review in [chapter 3](#) identified, although social media influencers are becoming an increasing focus in health research, the lack of clarity around terms used when describing influencers and health influence have made it hard to situate social

media influencers. To combat this, a health influencer framework was created using the methods described in [Section 3](#) and the completed framework can be seen below in figure 23.

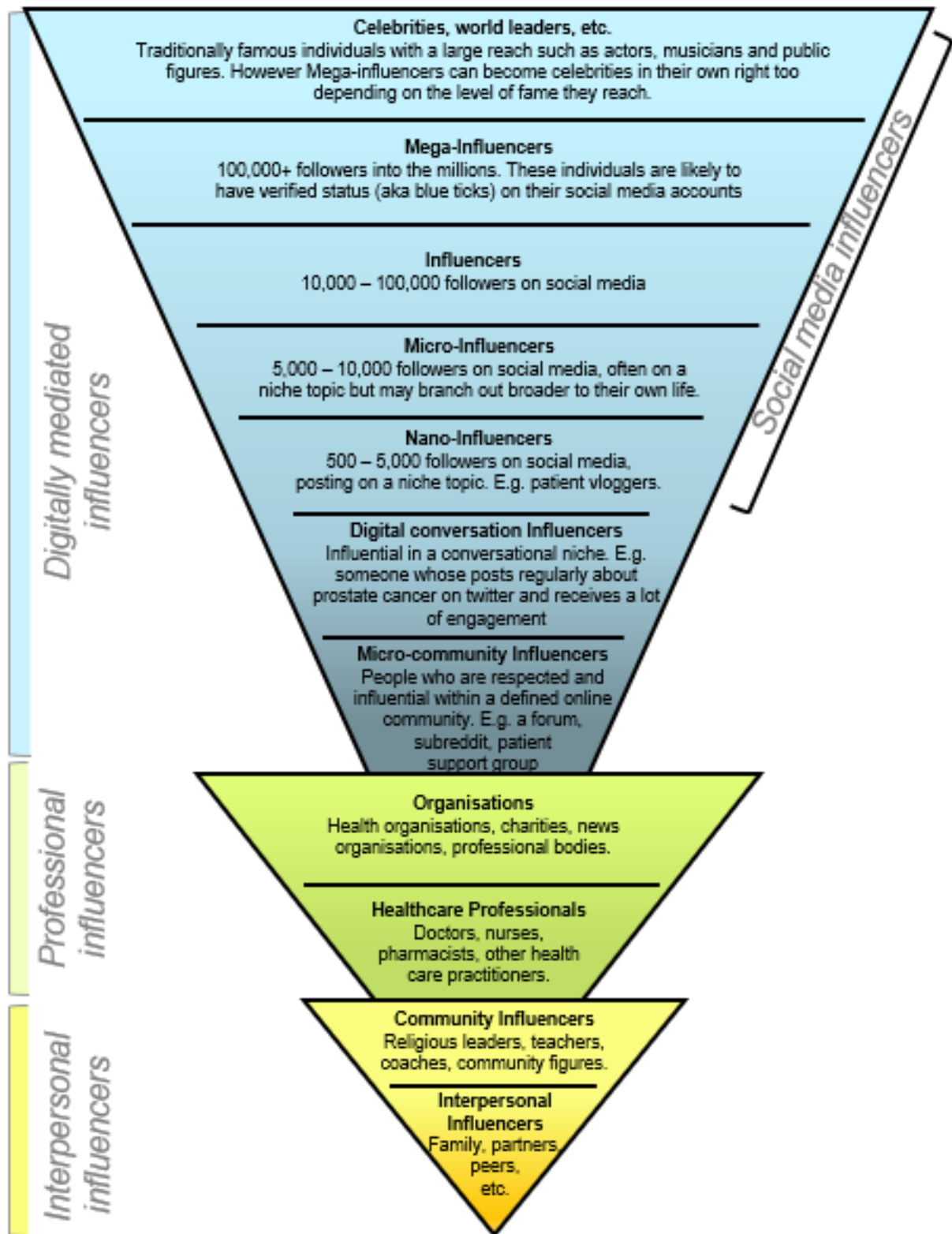


Figure 23 - The health influencer framework

The framework has not been designed to provide a prescriptive or rigid classification of influencers, but instead to provide researchers, health organisations and charities a starting point and way to understand the role of social media influencers in a health context. The framework also seeks to situate social media influencers within a larger spectrum of health influence that comes from other recognised sources such as healthcare professionals, community members, family, and peers, as the literature reviewed to create the framework demonstrated that these traditional health influencers are still vitally important, and social media influencers should not be viewed as a replacement to these sources of health influence, but a compliment.

The health influencer framework centres around three triangles⁶⁸ for the three categories of influencers who were identified during the development process described in [section 4.4.3](#): interpersonal influencers, professional influencers, and digitally mediated influencers. These categories may not always be mutually exclusive, for example there are healthcare professionals such as Dr Alex George, a qualified NHS doctor who rose to fame after appearing on the British reality television show *Love Island* and has become a media personality in his own right with over 2 million followers on Instagram. As such, George could be considered a digitally mediated influencer as a social media celebrity within his own right, whilst also being a professional influencer as a healthcare professional. Therefore, the framework provides new ways of thinking about and understanding this health influence, rather than acting as a prescriptive categorisation tool. In the case of Dr Alex George, the framework might encourage a researcher to consider how an individual encounters George as his influence will be different to strangers who follow him on social media than it would be on patients he treats in his day-to-day role within the NHS.

To understand the health influencer framework, we must consider both the weight and size of each segment of the diagram. We cannot and should not assume that influencers such as celebrities at the 'top' of the framework diagram have more influence than those below, although they do have wider reach due to the size of audience they are able to engage. However, just as in a triangle the weight or pressure

⁶⁸ It is important to note that the segments of the framework diagram are not intended to be interpreted as arrows, but as triangles that intersect, as is explained in paragraphs below.

is concentrated at the bottom of the point, in the health influencer framework, those at the bottom are likely to wield more intense influence as they are likely to have closer personal relationships with those they influence than those 'above' them in the framework. To take this at its most extreme we can compare the very top and very bottom segments of the framework diagram. Using a fictional example, an individual may be more likely to trust the advice of their parent or best friend about contraceptives, than if the celebrity Kim Kardashian recommends a contraceptive to millions of followers as part of an advert on her social media. In this example we can see that social media may afford someone a greater reach to potentially influence more people. But that influence may not necessarily be stronger or more effective than the influence wielded by those who have a small but intimate field of influence. For this reason, the health influencer framework should not be seen as arrows or a scale ranking from best to worst, but instead as three overlapping sections of influence. It is important to recognise all types of health influence and understand that digital influencers are not a replacement for traditional health influencers, such as interpersonal and professional influencers, but may offer an additional compliment to traditional structures of influence and provide greater reach.

The health influencer framework also provides us an opportunity to recognise the nuance between different types of digitally mediated influencers. For example, hypothetically, while a health organisation looking to run a social media campaign with an influencer may instinctively jump to using the influencer with the largest following, the framework may allow them to consider alternative options that may be a better fit for the project or campaign they are working on. Reinikainen, Tan, Luoma-aho and Salo (2021) have identified that for businesses selecting influencers to work with there can be challenges in associating your brand with an individual, this is because high-profile individuals may be more likely to invite controversy should they conduct themselves poorly online, a topic Cunningham and Craig (2017) also discuss in relation to one of the most popular YouTube influencers who was dropped from various commercial deals after posting videos with antisemitic sentiments online. Therefore, utilising the health influencer framework may allow health organisations and charities opportunities to consider a broader spectrum of influencers, beyond simply using the size of their audience to recognise their influence.

The health influencer framework also helps us to consider different kinds of networked publics (Boyd, 2008,2010) that can take place online around health influence. For example, whilst a conversation with an interpersonal influencer may take place offline in a face-to-face context, interpersonal connections can also be maintained online. To use a theoretical example, the framework could be used to aid in the discussion and understanding of how a friend posting on Facebook about having a negative reaction to the COVID-19 vaccine (aka an interpersonal influencer sharing health information) might influence a person compared to reading a tweet about COVID-19 vaccine safety from the World Health Organisation (aka an organisation influencer in the professional influencers section of the health influencer framework), and how these different types of health influence might contrast and compare. A similar comparison around types of health influencers young people look to and trust around the seeking of sex and relationships information will be discussed in [section 7.1.3](#) using the health influencer framework.

The study of influencers within the field of health is still in its infancy, the review process to develop the health influencer framework identified that, except for only two publications by the same research team (Liu et al., 2013; Huh et al., 2014) that can be categorised as being about nano-influencer patient-vloggers, all of the studies of social media influencers within a health capacity that met the criteria for inclusion (n=85) had been published since 2016. Thus, research into social media influencers and their impact on health is still growing, this can be seen through an uncertainty around terms that were reflected both in the systematic review and the process for developing the health influencer framework, where many (n=52 out of n=207) health-based studies failed to provide any definition of what they meant by 'social media influencer' or other interchangeably used terms. The health influencer framework helps us understand where social media influencers may fit both amongst other forms of digitally mediated influencers and health influence as a broader field. In addition, the framework is beneficial as it provides a unique contribution to this field of knowledge that can be used by future researchers to provide a clear starting point to navigate, discuss and understand where their research lies, and can be used by health organisations and funders to understand the different forms of digitally-mediated influencers they can engage with. However, to further the understanding of influencers use in sex edutainment as part of the broader health context it is essential to understand their

perspectives and how they are perceived and received by their audiences, as will be discussed in the next part of this chapter.

6.2 Understanding influencers

As outlined in [chapter 4](#), email interviews were sent out to sex edutainment influencers to gather their views, experiences and understand more about the practicalities of their role. Despite several attempts to reach out to the influencers in the recruitment strategy, only three influencers responded and answered the email interview questions. Therefore, the results here should be viewed as an initial, but limited, picture of influencer opinions, practices, and challenges, further discussion of the challenges of influencer recruitment are discussed in [section 8.5](#). Despite the minimal responses, the data collected provides insight that is useful to our understanding of influencer experiences. The data has been thematically analysed into five key aspects that were uncovered from the interviews.

6.2.1 Audience make up

Influencer respondents discussed how much of their audience was made up of young people. One influencer noted that roughly 20% of their following was made up of 13-18-year-olds, while another noted that:

'This is a tough question, 'cause youtube analytics say only 6%. But you need to know, that most of the kids claim to be over 18! Keep that in mind! So the years 18-24 are suddenly 49%!' – Influencer B

This is an interesting observation, highlighting that young people under the age of 18 may be engaging in disconnective practices (Light, 2014) to adapt their use of YouTube to their own needs by creating accounts with a falsified date of birth to allow them access to content that would otherwise be age-restricted. The final influencer noted that they did not use YouTube analytics to keep a track of their audience but instead tracked users that came to their website, with all videos on their YouTube account and content on all other social media sites pointing viewers to their website as a central hub. The google analytics from this site did not share data for users under the age of 18, but influencer C stated: *'Of the data I do have, around 30% of my traffic [...] is 18-24. I suspect that under 18s would account for at least this much again of my traffic*

(*judging by what they are searching for and what they ask me about*)'. Therefore, it would appear that a significant portion of these influencer's audiences are coming from the age group of interest for this study, indicating that this digital sex education content could be well suited for these young people.

6.2.2 Contact from audience members

Interviewees identified that they frequently received private messages and emails from their audiences seeking advice, however how the influencers dealt with them differed slightly. For example, influencers A and B took a more personal approach at responding to comments or messages where they could:

'I frequently have people contact me via email and on social media about some of the topics I've discussed online. If I'm able to confidently answer the question and link them to relevant resources then I'll endeavor to do so, but mostly from a safeguarding perspective I'll usually refer them on to a professional who is more knowledgeable and can help better than I can.' – Influencer A

'the (mainly) boys write several times a day. At the moment I only answer using the comment function, as my mailbox is full to the brim.' – Influencer B

It is interesting to note that Influencer A would be considered an 'influencer' within the health influencer framework, meanwhile Influencer B would be a 'mega-influencer', this may explain why influencer B is unable to manage as many personal responses, as they have more than double the number of YouTube subscribers as Influencer A whilst also running a website young people can use to submit questions.

However, follower numbers do not necessarily correlate to how personal or impersonal an approach is taken to contact from audience members, as Influencer C (a nano-influencer in the health influencers framework) with a significantly smaller YouTube audience, but a popular sex education website that receives over 90,000 views a month, followed a much more business-orientated approach when audience members approached them on social media:

'I channel all private messages to my [website] ask page, where I have clear terms and conditions of how I can help and not help. I also encourage young people to read my most frequently asked questions and to browse the website to see if I've already answered their questions.' – Influencer C

This raises interesting questions about how much personal response plays into the building of relationships with audiences and an influencers popularity. Influencer C's content does not feature the same talk-to-camera style that influencers A and B utilise, which Johnston (2017) has suggested is a key part of the way YouTube sex edutainment influencers build connection with their audience, and their more business-like approach may interfere with the balance between authenticity and approachability that Cunningham and Craig (2017) have highlighted as essential for influencers, which may explain why their YouTube account was not as highly followed as the other respondent influencers.

However, all three influencers identified that they always read the comments on their YouTube videos, although at times this might become challenging if a video was very popular:

'Yes, always, [read the comments] though sometimes they reach a volume which makes it impossible to read/respond to all of them' – Influencer A

'Building the community was important to me from the beginnning! I read every comment. Yes, EVERY SINGLE ONE!' – Influencer B

In addition, moderation was something each of the influencers was aware of and trying to maintain to keep their YouTube comments safe, however it was not always possible to avoid unsafe comments:

'I have automatic filters set up to remove any potentially dangerous comments as well as manually filtering any that slip through the net. Sometimes they still get through though as I don't see everything.' – Influencer A

However, one influencer noted that although they read all their YouTube comments, moderation issues were causing them to move away from allowing comments on their videos:

'I'm increasingly moving towards just preventing comments on videos on YouTube because I want to pre-moderate them. I read all the comments at my website, which I pre-moderate. I use the comment sections on the articles to respond to reader questions.' – Influencer C

Here we can see that attempts to maintain a safe space around YouTube sex edutainment content may interfere with YouTube's intention for community-building use of comments that the walkthrough data and Lange's (2019) work with YouTube communities noted. This also limits the opportunity for young people to engage with

others and form peer-discussions in the comments. However, a limitation of the email interview data is that the influencer in question did not state if they had ever tried using the automatic filtering that Influencer A mentioned. Therefore, it is not possible to know if this is an area that needs further development with YouTube or greater access to education and tools for influencers to make the most of existing software, however further development of future YouTube sex edutainment interventions should pay consideration to the role and importance of moderation of comments and how to go about this.

Finally, all respondents indicated that comments, questions, and feedback from their audience impacted the content they created. Sometimes this was through creating videos directly in response to commonly received questions, or a page of frequently asked questions on their own personal websites with a back catalogue of previously answered audience queries related to sex, relationships and sexual health. One of the respondents who also conducts classroom RSE lessons identified that questions they received face-to-face also fed into their digital content.

6.2.3 Training

All three respondents had some form of professional training, either they had invested in themselves to increase their credibility, participated in through relevant professional roles, or because they were a trained sex educator. *'I did the Training the Trainers course at [location] for HIV and Sexual Health [...] in addition to the training I received when I trained as a youth worker [...]. Since then I've become one of the leading RSE trainers in the field and regularly train practitioners.'* Stated one respondent, while another added *'I have received various training courses or advanced training courses myself. From, for example, physical / medical to psyche to substance consumption or use.'*

This highlights that some YouTubers may not be untrained lay people, and as their audience builds, they may invest in developing their professional training to ensure their content is factually accurate, however each influencer had different experience and training, and not all are clear on their channels or videos about what training they have had, if any, highlighting there is no fixed standard or accreditation available to

sex edutainment content creators to help them ensure that they are creating evidence-based social media content.

6.2.4 Problems with YouTube

Respondents were asked ‘Have you found any platform policies from YouTube or the other social media platforms you use have limited your ability to produce the content you would like?’ All three highlighted that YouTube’s policies made it challenging to create, share and monetise sex education content on the platform. As one respondent highlighted:

‘YouTube, in particular, heavily restrict sex-education based content, both making it impossible to monetise and make a living from, and also restricting the potential reach of the content. Sex ed based content specifically targeted at teenagers for instance often won’t reach them as it will be marked as 18+.’ – Influencer A

Another felt YouTube’s guidelines around sexual content caused problems for creating edutainment style content:

‘The latest YouTube guidelines⁶⁹ state that educational content must not be funny. Laughter is unequal to education. And since I talk about sexuality in general, almost all videos are demonetized, so I make very little money. Showing body parts immediately leads to an 18+ restriction. It’s okay when drawn.’ – Influencer B

Meanwhile Influencer C identified that not only were these restrictions limiting their ability to create and share content, but these barriers were putting them off from creating social media content at all:

‘Yes. A lot of my videos have been age restricted by YouTube and there’s a constant battle for me to keep trying to prevent this from happening. Also I can’t monetise any of the videos (ie have ads) because of the content. Instagram and facebook also often restrict my social media posts because it’s sex education. It’s happened so many times that I’ve lost count. Also content has just been silently deleted without telling me.’

⁶⁹ It is interesting to note that in the updated walkthrough I was unable to find corroboration of this in the community guidelines or other policies reviewed, however this may be due to a change in policy between the interview and the walkthrough as YouTube is a non-static site that is constantly evolving and they regularly update policy pages, alternatively YouTube have many hundreds of policy pages and although the walkthrough endeavoured to be as thorough as possible in reviewing any relevant policies, the referenced guideline might not be within the reviewed documents.

There are so many barriers to me doing sex education on social media that I tend not to bother. I just try to use the various platforms to invite the viewer to visit the website. Only a small proportion of hits to my website are from social media, around 2 - 3%. This is because of the above restrictions but also I think due to the non-normative and critical sex and relationships education I'm putting out into the world.'

This comment highlights that YouTube's policies and limitations around advertising on sex edutainment content may be putting off those with the skills and interest to create YouTube sex edutainment content, causing limitations for this form of digital education. For this reason, two of the three respondents had a separate website that they used to share content without restrictions. One respondent also highlighted that they did not consider themselves an influencer as they avoided appearing in their own materials as they felt young people would not want to see someone older on screen, yet their YouTube content still had a good viewership⁷⁰ and enough of a YouTube following to be considered a nano-influencer using the health influencer framework.

6.2.5 Working with public health organisations

Respondents to the email interview had few previous collaborations with public health organisations. One influencer identified that they had collaborated to show how a HIV testing worked and had been given 'STI cuddly toys'. Another noted that they had taken part in a Public Health England campaign via a large HIV charity on an unpaid voluntary basis, but that the only paid campaigns related to sexual health had been via brands such as a condom manufacturer. The influencer with the smallest YouTube following identified that they had never done any campaigns with sexual health organisations however they emphasised '*I unilaterally promote other organisation's campaigns or big up their work, if I see that they are doing something really valuable.*'

When asked how public health organisations could support them in creating sex edutainment content, the respondents unilaterally identified that funding was the most valuable way that their work could be supported and strengthened through partnership.

'As the content isn't able to be monetised, it can only be created as a passion project. Monetary support - along with the knowledge and information they can bring- would massively help in creating better and more effective regular content to meet those goals.' – Influencer A

⁷⁰ with many videos receiving thousands of views, and one with over 600,000 views, although video views were mixed, with some videos also receiving under 100 views.

The lack of funding was identified as a barrier preventing these content creators from expanding their content:

'Funding, or avenues for funding, would be great. I'm just an individual running what [organisation] says is one of the leading sex and relationships education websites online for a couple of days a week. I receive some limited sponsorship from [condom brand] and I have a small crowdfund via the Patreon platform. However it's not enough to do what I would like to be able to do with it.' – Influencer C

This reliance on businesses and funding through the audience may limit accessibility and impartiality of content, but without additional funding streams influencers relied on these routes to fund the time required for content creation. Some suggested that alongside financial backing, public health organisations could provide additional support like flexible scripts, whilst respecting the authenticity of the influencers channel:

'With money primarily or with ready-made scripts. It is always problematic that a right to have a say is demanded⁷¹. But then the channel loses its authenticity. A monthly payment and ready-made scripts that I can stick to, but don't have to, would be ideal.' – Influencer B

This comment hints at the tension influencers may feel between their obligations to funders and their audiences, as Cunningham & Craig (2017) have suggested influencers are constantly engaged in a negotiation between appeasing sponsors and maintaining their authenticity and voice with their audience. Meanwhile, McKee (2017), in discussing how educators and media entertainment producers can come together to create sexual health edutainment, has highlighted that *'Acknowledging that we as educators have much to learn from entertainment producers is an important step forward in these relationships'* (p.38). Whilst McKee was discussing a different medium of print magazines rather than social media, his point remains valid in this context, that educators and health organisations would be wise to recognise and respect the unique knowledge media producers have of their audience and how to communicate with them.

⁷¹ This comment highlights that a funder wishes to have a say on the content they sponsor, and that there is a delicate balance for the influencer in observing the funders wishes while still having the content remain truthful to their own voice.

These influencer responses also highlight that at present public health organisations may be under-utilising social media influencers when it comes to the creation and dissemination of sexual health content. However, given that public health funding, particularly for sexual health, has been through extensive cuts (Health and Social Care Committee, 2019) future thought needs to be given to the ways public health organisations can utilise these opportunities in a sustainable way. However, as one respondent highlighted, these relationships may need strengthening.

‘Generally speaking I’ve had exceptionally little support from public health or education organisations. My resources rarely get shared by them. Very few of them reach out to me to offer support or want to work with me. Some of them have been outright obstructive.’

This lack of relationship between sex edutainment influencers and public health organisations may be due to a lack of awareness on the part of organisations about the content available, or how it can be utilised. The discussion in [section 8.4](#) explores the implications and recommendations for public health organisations based on the overall findings of this research to aid organisations awareness of the future possibilities and problems of utilising these interventions. Despite the challenges influencers expressed, all the interview respondents encouraged public health organisations to reach out to them via their public email addresses and welcomed future collaborations.

6.3 Understanding response to influencers and their content

In addition to the written interviews with influencers, analysis of the public comments scraped (see [section 4.4.2](#) for methods) from YouTube sex edutainment influencers content was thematically assessed to identify the dominant narratives in the public response to influencers and their content (see [section 4.4.2.2](#) for analysis method). Given the public nature of this data and that comment writers have not specifically consented to their comments appearing in this thesis no comments will be quoted in full, however they will be described and words and phrases of note will be highlighted to provide a clear picture of the findings from the data (see [section 4.4.2.1](#) for discussion around ethics within online research).

Four key areas of response to YouTube sex edutainment influencers were identified during the thematic analysis; educational potential, influencers as role models, resistance to influencers, and peer-support building, and are presented in the remainder of this chapter.

6.3.1 Theme 1 - Educational potential

Sex edutainment influencers occupy a position between entertainer and educator (Johnston, 2017) and the analysis identified that learning and engagement with the topics is taking place within these online spaces. Discourse about the video topic was prevalent in the comments. Analysis of the 100 most common one, two, three and four word phrases for each video included (n=22) identified that keywords related to the theme of the video were present in every video. For example, in one video about coming out as LGBT+ the 1st most common two-word phrase was '*came out*' (n=84 mentions), with '*come out*' as the third most common two-word phrase (n=74), and '*coming out*' the 10th most common two-word phrase (n=53). Likewise, in a video about consent, the top 100 words and phrases included topic-relevant terms including '*rape*' (n=4160), '*sex*' (n=3817), '*consent*' (n=3603), '*drunk*' (n=2693), '*sexual assault*' (n=294), '*rape accusations*' (n=147). It may seem evident that phrases relating to video theme would appear in the common phrases, however, this demonstrates that the video content is engaging the audience in discussion or debate about the topic and creating opportunities for viewers to share their opinions or critically engage with the content.

Engagement was also demonstrated through audience questions about video topics, for example, one commenter asked for clarification of the difference between the terms 'STI' and 'STD' and why one might be used over another, after watching a video where STI's were discussed. Another commenter on a video by a transgender YouTuber asked for someone to explain the terms transfeminine and transmasculine and the pronouns used for each one as they had never heard the terms before encountering them within that video. Whilst this shows engagement with the topic, not all questions were answered by the influencer or by other commenters which indicates that some information needs may remain unmet. However, the influencer's interviewed in section 6.2 stated that questions from the audience fed back into their content, therefore, while

an influencer may not respond personally to every comment, they may use these questions as inspiration for future videos. This does mean that not all questions are answered though and highlights that one area where YouTube sex edutainment is limited is in the ability to provide individual support compared to face-to-face interventions.

The comment analysis also identified that YouTube sex edutainment content may be filling gaps in information provision as many commenters shared sentiments around wishing they had seen the information and advice in the videos earlier. Several commenters on a video related to relationship abuse stated they wished someone had sent them the video when they had a controlling, abusive partner, with one emphasising that if she had seen a video like this before she could have '*seen the signs sooner*'. Another user commenting on a video about consent explained that the night prior to viewing the video they had been in a sexual situation where, although they intended to have sex with the person in future, they had not wanted to that evening and had struggled with how to express themselves, they identified that the video had helped them understand ways to communicate in that situation in future. Johnston (2017) suggests that users sharing the way this YouTube sex edutainment content has changed their thinking '*seek recognition from the person who has inspired their new way of thinking*' (p.89) which not only demonstrates changed ways of thinking but also plays into the building of parasocial relationships between the influencer and the commenter, as will be explored further in [section 6.3.2](#).

In addition, commenters often discussed how they wished the YouTube video content had been included in their RSE. Commenters on several videos expressed that school or parents had not provided them with this information, and these comments were often framed in relation to gratitude to the influencer for providing this knowledge and information. One commenter felt UK sex education was '*crap*' as their one session on RSE had been cancelled due to teacher illness and was never rescheduled. Instead, they stated they had found the information out for themselves but worried about missing '*key information*'. Another expressed learning more about a topic in the 15-minute video than in their entire school RSE. A video covering sex education for gay men featured a comment praising the influencer for making content related to LGBTQ+ sex education because they felt it was not taught to those who needed it. One

influencer with a large following (a mega-influencer according to the health influencer framework seen in [section 6.1](#)) received many comments on their videos stating that their content and the topics discussed should be taught in schools, with one response stating that schools needed to answer '*real questions*' that young people had in sex education. This indicates that this content appears to be filling gaps in provision, as was suggested in [chapter 2](#), however as YouTube is global, these examples cannot all be assumed to be about the UK RSE system. Yet these findings do support Johnston's (2017) suggestion that YouTube sex edutainment influencers challenge '*their audience to reevaluate preconceived notions of sex learned in school and other social spaces*' (p.89) and beyond this, the data suggests YouTube sex edutainment influencers are encouraging some viewers to challenge existing systems of RSE and the content that is included or excluded from them.

Video commenters frequently expressed gratitude for the content and thanked the influencer for providing information that helped them. For example, one person thanked the influencer on a video on relationship tips for saving their relationship with advice about negotiating with a partner, whilst another posted thanks on a video about consent as viewing the video helped them during their first sexual encounter with their partner where they checked in with each other to make sure they were okay throughout. A video about wedding night tips from a religious influencer, lead to several comments thanking the influencer for reducing their shyness about their impending wedding nights, with one expressing they were pleased to finally find a video about the topic from the perspective of their religion. In a similar video created for a specific population that focused on having sex and feeling sexy with a stoma bag many comments from audience-members expressed gratitude for the information as they struggled to find specialised support for their experience. These comments around gratitude and helpfulness suggest the individuals had learned something valuable to them from the content.

Additional impacts were noted within the comment data, such as changed attitudes and awareness. Commenters suggested becoming '*more educated*' about their bodies, in control of their sex lives, secure in themselves, having learned how to avoid negative sexual relationships, and improve their '*body image*'. One commenter

expressed the influencer discussing vaginal discharge had '*actually changed my life*' by helping them know it was normal.

In addition, some respondents identified that they had used the information provided in the YouTube sex edutainment video to inform their own sexual health choices. On a video about virginity several comments showed that viewers were able to apply the content to their own situations, for example, one commenter expressed feeling pressure at 16 to have sex but after watching the video they felt a lot better and decided to wait and ignore the peer pressure. Another commenter on the same video had been nervous about their readiness for sex but stated after watching the video they felt confident to communicate with their partner and have sex for the first time. Meanwhile, another found the video helpful because they didn't have anyone else to talk to about the topic. These comments highlight that the content armed the audience with information to help them make their own informed choices.

Although the literature review identified that YouTube sex edutainment might fill gaps in existing learning provision around intersectional topics such as a disability, sexuality, or religion, it could be assumed that this content is only valuable to those who experience these intersectional differences. However, a common subtheme across the data set was users watching videos to expand their views and learn about other people's perspectives and experiences. Some expressed doing this to learn more about their friends' experiences, such as a heterosexual female who commented to say that they loved learning from the influencer as it helped her understand the perspective of non-heterosexual friends and how to help them. Others expressed being interested in learning something new, like one commenter who expressed that they liked seeing videos about topics not often shown in classrooms. Many commenters expressed positive sentiment to learning new world views through the video content, even if it did not apply to them, and some expressed interest in taking the knowledge they had learned from the video forward into their communities. Users discussed sharing videos with friends, e.g., belonging to a group of girls at school who share their favourite videos from the sex edutainment influencer with each other, or sharing the video on a Facebook group they belonged to. These networks were utilised both online and in person. Further, a commenter mentioned they had been recommended a video on asexuality by a friend after expressing confusion about their sexuality, whilst others

discussed taking notes to share with a friend or showing a person a video if they felt they needed it. Commenters also used videos to communicate issues they struggled to verbalise, e.g., one user who had watched a video on virginity stated they had shared it with their boyfriend before having sex, so they were both on the same page, and a transgender individual mentioned sharing a video on trans sex education with their partner to help them understand the issues they were having. These examples demonstrate various forms of media utility viewers may experience by strengthening their friendships and relationships through these media circuits.

Finally, several videos had comments from parents, teachers and nurses using the content to educate, and better inform themselves for supporting with those who saw them as information gatekeepers. A nurse identified that they recommended content by a gay male influencer to several of their patients, meanwhile a sexual health educator mentioned that YouTube sex edutainment content was helpful for them to share during the COVID-19 lockdown when they were not able to teach in schools. In families, a single father of two teenage girls expressed that subscribing to an Sex edutainment influencers channel had helped him communicate with his daughters, and one commenter stated that they watch the influencers sex edutainment videos as a family to encourage open communication about the topics. These examples tie into the literature suggesting the value of including parents in RSE (Walker, 2001; Walker, 2004; Yu, 2010; Sheppard, 2020, Alldred, Fox & Kulpa, 2016), and highlight additional potential in the 'spreadability' (McKee et al., 2018) of YouTube sex edutainment content for learning in a variety of different contexts.

6.3.2 Theme 2 - Role models

Within the YouTube comment data, the overall sentiment was positive towards most influencers (Findings related to negative sentiment are covered in [6.3.3](#)). As explored in [6.3.1](#) commenters expressed gratitude to the influencers in every video within the data set, often combining this with messages that explained how helpful the content was. However, some audience members went further, demonstrating a level of trust or perceived connection with the influencer where they viewed them almost as if a friend or role model, forming a parasocial relationship as discussed in chapter 3.

Across the videos many phrases were used which indicated that some users looked up to the influencers or viewed them as a role model, see figure 24 for examples:

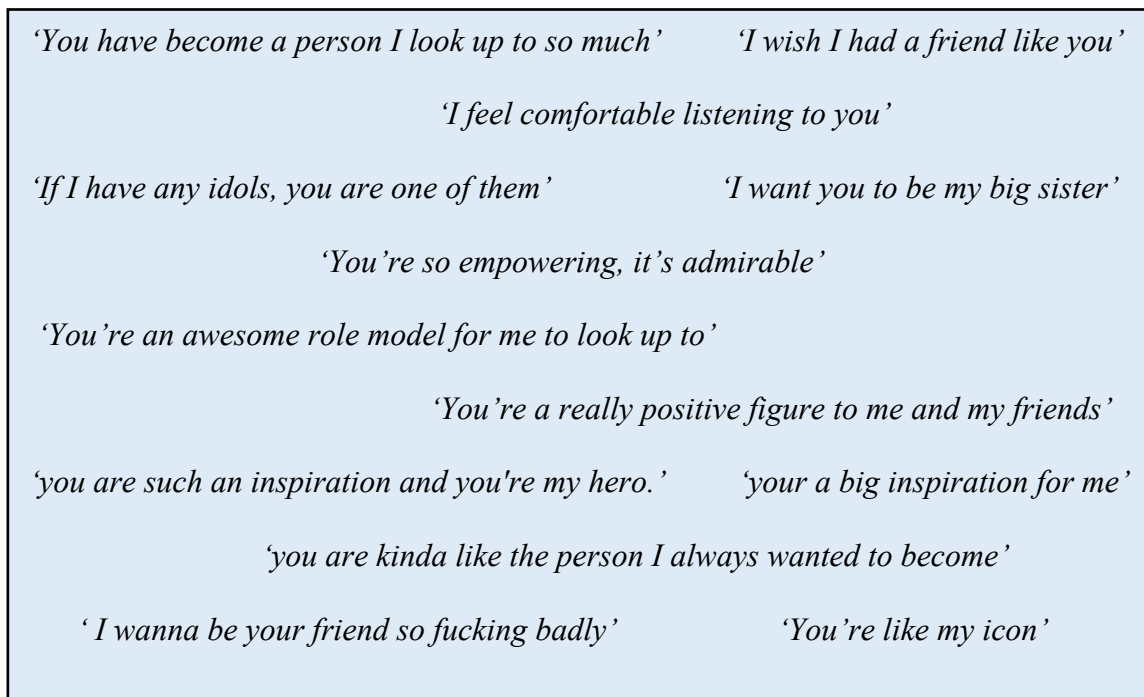


Figure 24 - Examples of role model phrases

Commenters regularly addressed comments directly to the influencer as though conversing with them. Negative comments were more likely to be written in the third person talking about the influencer (e.g., 'His voice is irritating') in a way that depersonalised them, but those who viewed the influencer as authentic were likely to direct comments and questions directly to the influencer. As the examples in figure 24 demonstrate, the influencer-audience relationship can become one tied into fandom cultures where the audience view the content creator as a celebrity, and in some cases, comments mirrored the way a person might speak to a friend. For example, one comment addressed to an influencer highlighted that they should '*never forget*' that they were accepted by their audience. Another commented to say that although they knew the influencer did not know who they were, they felt the influencers '*love and support*'. These comments suggest that some audience members of sex edutainment influencers build the illusion of a relationship with the influencer through a process of parasocial interaction (Horton & Wohl, 1956). The follower of another influencer expressed an even stronger connection suggesting they were similar to the influencer, making them and the influencer '*soul sisters*', demonstrating the perceived sameness between influencer and audience-member that Esch et al., (2018) noted was a key

element in the creation of trust. These findings suggest that some audience members do look up to Sex edutainment influencers as a role model, object of fandom or almost as if a trusted peer.

Comments where the viewer considered the influencer a role model were often accompanied by declarations of the influencer's authenticity, expressing how '*real*' or '*open*' they thought the influencers were. One commenter expressed that they '*Love how open you've been*' and wished they had a person like the influencer when they were a teenager themselves. Others mentioned influencers '*honesty*' or how they were '*unapologetically yourself*'. Many comments mentioned how much they appreciated hearing someone speak openly about the sex education topic, as one sentiment added '*you're willing to go where no one else is*' and another stated they loved the influencer because they were '*Honest, unafraid, and hilarious*'. This links to Cunningham and Craig's (2017) suggestion that social media influencers use distinctive modes of address that situate themselves as authentic, and some audience members of YouTube sex edutainment content interpret this relaxed mode of address and willingness to discuss potentially taboo topics as honesty and authenticity.

One other indication that audiences look up to the influencers and trust them as a source of information is that commenters frequently sought advice or information. For example, in a video about virginity some of the advice requested included asking for tips on how to relax for a first sexual experience, what to do if a boyfriend wants sex but you are not ready, and if specific positions would be best for a first time. Meanwhile, on a video about untreatable STIs, user questions included if it was true the gonorrhoea caused a burning sensation when urinating and asking if STIs were transferable through masturbation. Some commenters also used the comments to request information on other sexual health topics not contained in the video or request future video content. Below are five examples from the data of video topics and the unrelated questions asked by commenters on those videos (paraphrased for commenter anonymity).

| Video topic | Question asked |
|-----------------------------|--|
| Consent | Do you take your glasses off during sex? Not sure when or how to do it. |
| Questions to ask before sex | How do I tell someone I'm a virgin? |
| Gay sex education | Could you do a video on circumcision and condoms? |
| Trans packing ⁷² | Can you make a video on dating advice? |
| Masturbation | Can you do a video on preparing to lose your virginity and what to expect? |

Table 13 - Audience questions unrelated to video topic

In addition, the use of a question-and-answer format was used in one of the analysed videos, where the influencer answered LGBTQ+ related questions from their audience, particularly around transgender topics. The responses to the video demonstrated that the respondents not only looked up to the influencer as role model (responses included *'you are such an inspiration'*, *'you gave me the courage to be myself'*, and *'you've helped me so much during my life'*), but also as a source of valuable knowledge, with one commenter expressing that the video was helpful to them as they lived in a country with limited transgender healthcare, while another expressed that the details of an online global LGBTQ+ counselling service that had been provided was useful. These findings support Johnston's (2017) suggestion that the ability to ask questions and have the influencer respond to them situates them as an accessible knowledge source:

'Question and answer sessions have been effective in enforcing the two-way nature of educational videos because they encourage curious viewers to ask questions anonymously. Although this mode of engagement allows the producer to gather material and ideas for their next video, it also positions them as a significant figure conveying personally meaningful information to an audience. Viewers might then begin to look to the YouTube educator as an accessible source for knowledge' (p.87)

Beyond the asking of questions and for general advice, some users also demonstrated an element of trust in the influencer, and the community they have created, by sharing personal anecdotes and experiences from their own lives. Some sought advice for their personal situations, for example on a video about masturbation a commenter shared their difficulty in reaching orgasm with a partner and despite trying sex toys they were still not reaching climax, leading the commenter to ask if they would ever be able to

⁷² Packing is when a person without male genitals 'packs' their underwear to appear or feel as though they do.

orgasm or were doing something wrong. Others shared personal stories to express affinity with the video content, for example a transgender individual posting on a video about trans sex education described their personal challenges communicating with a previous partner when they used terms to describe the commenters genitals that made them uncomfortable. Another commenter on a video about questions to ask before sex shared that communicating with their partner before sex had been a positive experience after past sexual trauma and made them closer with their partner.

However, it is worth noting that despite the frequency of requests for advice and personal experiences shared, influencers only occasionally responded to comments. Although the influencers interviewed in this research stated that they read all their comments and some aimed to respond, direct responses to video comments were incredibly rare, with comments from the influencers themselves accounting for only 0.2% of comments in the dataset. Although influencers only occasionally responded to comments, this appeared more likely to happen on videos with fewer comments, or where the severity of the comment warranted a response. For example, on one video about STIs a commenter expressed that they were concerned they might have HIV but were terrified to get tested and felt the only option left for them was to end their life. In this case the influencer⁷³ responded promptly and left a long and considerate comment with reassurance and advice, directing them to sexual health services that could help them. This demonstrates that some influencers are able to act in these situations, however they may be time-limited to do this as some videos received thousands of comments and may not be able to identify comments that require immediate attention which may explain the earlier concerns influencers expressed about comment moderation. This may mean that some opportunities for sexual health learning are being lost, however, instead other users within the comments often answered questions and provided advice as will be discussed in [section 6.3.4](#).

⁷³ It is valuable to note that this influencer was one of the respondents to the email interviews in section 6.2. Therefore, this example observed in the data confirms the influencers statement that they do read all comments, and the public response observable confirmed the influencers responses about how they would try to guide people to professional sources where possible.

6.3.3 Theme 3 - Resistance

Whilst positive responses were most common within the data set and demonstrated the educational and role model potential of this content, some users expressed resistance to influencers. This resistance was primarily expressed through dislike, disputing information and trolling.

Examples that commenters gave of dislike included one user suggesting an influencer was a '*fountain of bad advice*', whilst another criticised that the content of a video was similar to a prominent campaign and lacked originality. Sometimes criticisms of influencers were linked to their physical or personal features such as suggesting they had an '*irritating voice*', or that they looked too young to be giving advice on the topic. However, the most common expression of dislike towards influencers and their content was from those who felt the topics were inappropriate or rude, examples of this included commenters stating that an influencer was obsessed with sex, suggesting the influencer was wrong to use the words penis and vagina in a video, or that the sex edutainment content was an example of how degenerative society had become. This highlights that societal resistance to open communication around sex may still be a barrier with YouTube.

Occasionally commenters also questioned the authenticity of the influencer, for instance referring to a trans influencer as a '*transtrender*' (a term which implies a person only identifies as transgender to be trendy) whilst others were referred to as '*posers*'. Other commenters suggested that the influencers relationship to earning money on their platform made them inauthentic, suggesting that they were '*money grabbing*' or '*only interested in making money*' with one comment asking how the influencer could be a reliable, objective source of information whilst they were using their platform to sell merchandise and products.

Another way influencer authenticity and credibility were challenged was by disputing information in videos. This was most associated with videos which may be considered contentious topics where commenters messaged with their disagreement over the content and its informational value. For example, on a video about intersex individuals some users responded that the influencer was wrong, and that intersex was a birth defect not a different gender. Occasionally comments corrected information that

influencers had got factually incorrect e.g., one influencer was challenged on a video about untreatable STDs for confusing bacterial and viral infections, while another commenter on the same video disputed where the influencer was getting their information from. It is interesting to note that this influencer was one of the influencers interviewed in [section 6.2](#) who had training related to sexual health, which demonstrates that inadvertent spreading of incorrect information is possible even for trained individuals. Meanwhile, other influencers were asked about their qualifications, or had audience members dispute terminology (e.g., how 'transgender' had been defined in a video).

Some users went beyond expressing dislike and disputing information and engaged in acts of trolling⁷⁴. Trolling can be difficult to identify, as in some cases there was a fine line between bluntly worded dissenting opinions, and messages intended to offend and upset the influencer (or others reading the message). Trolling took many forms in the comment analysis, from telling a distasteful joke about abuse on a video about relationship abuse, to making derogatory statements on a video about asexuality suggesting they were attracted to inanimate objects as a form of mocking the content.

Female influencers in the comment analysis received more trolling comments towards them than their male counterparts. However, the content of trolling comments varied depending on the individual influencer. One female influencer received a small number of trolling comments, but these were mostly sexualised comments about her body or designed to make her feel uncomfortable (e.g., Objectifying her breasts or asking if she liked specific explicit sexual practices). In comparison a trans influencer received trolling comments related to disgust at their gender identity and the lesser-known sexualities they discussed in their videos. On a video about wedding night tips by a religious influencer, several trolling comments were made from the same commenter, trying to encourage her to talk about her own sexual experience and asking about armpits fetishism. Meanwhile the influencer with the most followers (a mega-influencer in the health influencer framework) received many trolling and aggressive comments, with some calling her fat or sexualising her by talking about her breasts, while others were aggressive, telling her to '*go kill yourself*' or suggesting that she should be burned.

⁷⁴ Trolling is a process of intentionally causing disruption, outrage or offence online through anonymous commenting (March & Marrington, 2019; Sanfilippo, Yang & Finchman, 2017).

This influencer had been outspoken on being a feminist and many of the aggressive or trolling comments were anti-feminist in nature, supporting Cole's (2015) suggestion that violent and sexual trolling can be used as a disciplinary rhetoric against women who openly participate as feminists in public online spaces. As the influencer with the highest number of followers received the most negativity from their audience this could be an indicator that the number of followers does not specifically indicate wider popularity or trust, however this could also be because of their feminist identity or because their larger public presence makes them more of a target for this behaviour, the data does not give a clear insight. The email interviews with influencers in section [6.2](#) did not gather data about the influencers experience of resistance, trolling or harassment, therefore future interventions working with influencers may wish to do further work in understanding how these forms of resistance impact both the environment around YouTube sex edutainment and the mental health and support needs of sex edutainment influencers.

6.3.4 Theme 4 - Peer support and community safety between commenters

One unexpected finding from the comment analysis was the way that commenters not only engaged with the influencer who created the video, but also with each other, as the beginnings of peer support were observed in the comments. Every video included in the scraping had commenters sharing real-life stories related to the video topic, seeking and giving advice, or asking for more information about other interrelated topics. These were some of the most frequent subthemes within the comment analysis. For instance, on a video about relationship abuse a commenter sought advice in understanding if the controlling behaviour exhibited by their best friend towards them was an example of relationship abuse and what they should do, while others sought advice on how to help a friend they suspected was in an abusive relationship, how to know a person wasn't lying about having a sexual health check-up, or how to know if they were ready to have sex. As discussed in [section 6.3.2](#) most commenters addressed this as though directly to the influencer, however, although the influencers almost never responded to these comments, other users often did.

Commenters gave advice to each other on a variety of topics including how to wash their vagina safely, how to shave, and ways to reduce body dysmorphia for trans

individuals approaching sex. Users offered to help other commenters, by responding to their messages and occasionally telling them they could direct message them with any questions or if they needed support. This created a positive community atmosphere in the comments of many of the videos, with one user suggested they loved the positivity in the comments on one influencers video, and a different video received a similar comment about loving how 'open' the commenters could be with each other. This data gives shape to the claims of Johnston (2017) that YouTube sex edutainment influencers cultivate communities where insights about sexuality can be shared.

However, the community within the comments was not always positive. Disagreements occasionally broke out between commenters, such as in a video on virginity where some commenters felt passionately that virginity should be saved for marriage, whilst others argued against this. In one extreme case a disagreement resulted in someone being told to go kill themselves⁷⁵ by another commenter, although other commenters came to the defence of the person to ensure they were not badly affected by this. Furthermore, tensions between users occasionally escalated due to trolling and the posting of inflammatory views, however, it was sometimes difficult to tell what constituted a 'trolling' comment and what was someone disagreeing strongly in a way that might be deemed inappropriate to others as trolling is highly subjective (March & Marrington, 2019).

One incident observed in the comment analysis causes particular concern for this research. When one commenter expressed that they were underage, other users noticed someone trying to obtain the young person's personal details and intervened having identified this as a potential sexual grooming situation. The young person had publicly posted their phone number in response therefore another user commented to warn the young person their safety could be in danger and explained they had flagged this using YouTube's flagging features to remove their personal details. As discussed in [section 5.2](#) around harassment and child protection guidelines, these examples raise concerns over encouraging young people into an online space for sexual health learning where there is a lack of moderation to ensure that it is a safe space and where

⁷⁵ The use of telling an individual to kill themselves via social media has been noted in other studies on cyberbullying and trolling both in relation to users and celebrities (Nilan et al., 2015; Wolfe, 2019)

they may be engaging with strangers with unknown motives. Although YouTube may encourage community building, there are also limited ways to ensure the digital space remains safe and moderated without more active involvement from influencers to moderate the comments on their videos, demonstrating why some influencers may be reluctant to have comments publicly available without pre-moderation (as discussed in [6.2.2](#)).

6.4 Conclusion

This chapter has laid out the key findings from the three steps of phase two, all relating to social media influencers, their role within health influence, the perspectives of sex edutainment influencers themselves, and how their audiences respond to them.

The key findings identified in this chapter are:

- This chapter has identified where social media influencers fit within existing modes of health influence through the creation of a novel health influencer framework which provides a unique contribution to knowledge.
- At present public health organisations do not appear to be fully utilising the opportunity to partner with YouTube sex edutainment influencers.
- YouTube sex edutainment influencers have educational potential and are seen by some of their audience members as role models.
- Some users share YouTube sex edutainment content with their friends, family members and professional network, providing potential for peer education and additional dissemination.
- Commenters on videos suggested that content had helped them fill in the gaps where their sex education had been unsatisfactory, including around LGBTQ+ issues.
- However, there are additional challenges for YouTube sex edutainment influencers in managing moderation of their comments, funding, and the demonetisation of content, and some audience resistance.

In addition, from the findings of this chapter we can see a further population of the elements that influence the role of influencers within the assemblage of YouTube sex edutainment, as can be demonstrated in the data web in figure 25 below:

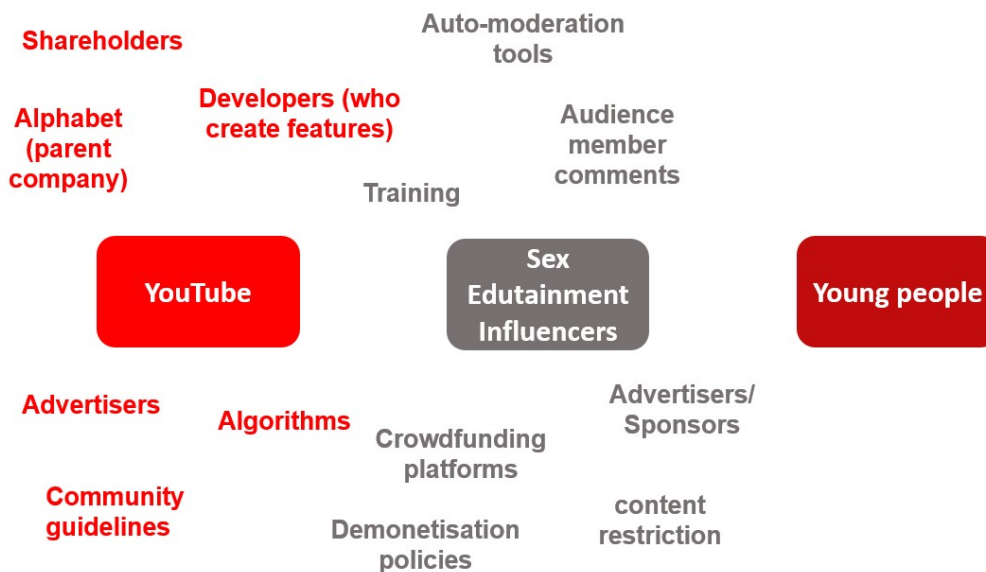


Figure 25 - ANT data web stage 2

The next chapter will present the findings from the third and final phase of the research, surveys with young people aged 13-18-years-old and 19-24-years-old, to identify their opinions around YouTube sex edutainment, influencers, and the ways they seek and share relationships, sex, and sexual health information.

Chapter 7 - Findings: Understanding young people

7.0 Introduction

Having identified the findings from phases one and two of the research in chapters 5 and 6, this chapter shares the findings from the third and final phase which explored the opinions and practices of young people. Two surveys were conducted, one with 13-18-year-olds (n=50 respondents) and the other with 19-24-year-olds (n=35 respondents).

This chapter draws comparisons between the two age groups to identify similarities and differences, and understand independent sexual health learning both during and after compulsory school age in the UK. Each cohort has been treated as a separate dataset, and the demographics of the respondents can be seen below in table 14.

| Demographic question | 13-18-year-old cohort | 19-24-year-old cohort |
|----------------------------------|-----------------------|-----------------------|
| Age | % of respondents | % of respondents |
| 13 | 14% (n=7) | 18.2% (n=6) |
| 14 | 25% (n=12) | 6.1% (n=2) |
| 15 | 27.1% (n=13) | 9.1% (n=3) |
| 16 | 10.4% (n=5) | 21.2% (n=7) |
| 17 | 10.4% (n=5) | 15.2% (n=5) |
| 18 | 12.5% (n=6) | 30.3% (n=10) |
| Gender ⁷⁶ | % of respondents | % of respondents |
| Male | 25% (n=12) | 8.6% (n=3) |
| Female | 64.6% (n=31) | 88.6% (n=31) |
| Trans man | 2.1% (n=1) | 2.9% (n=1) |
| Non-binary | 4.2% (n=2) | 0% |
| Race | % of respondents | % of respondents |
| White British | 83.3% (n=40) | 94.3% of (n=33) |
| Any other white background | 4.2% (n=2) | 0% |
| White and Black Caribbean | 2.1% (n=1) | 2.9% (n=1) |
| White and Black African | 2.1% (n=1) | 0% |
| African | 0% | 2.9% (n=1) |
| Chinese | 2.1% (n=1) | 0% |
| Other Asian background | 2.1% (n=1) | 0% |
| Any other ethnic group | 2.1% (n=1) | 0% |
| Sexuality | % of respondents | % of respondents |
| Heterosexual | 66.7% (n=32) | 70.6% (n=24) |
| Bisexual | 20.8% (n=10) | 14.7% (n=5) |
| Gay/lesbian | 4.2% (n=2) | 5.9% (n=2) |
| Other | 0% | 5.9% (n=2) |
| Prefer not to say | 0% | 2.9% (n=1) |
| Religion | % of respondents | % of respondents |
| No religion | 72.9% (n=35) | 71.4% (n=25) |
| Christian | 22.9% (n=11). | 20% (n=7) |
| Muslim | 0% | 2.9% (n=1) |
| Any other religion ⁷⁷ | 4.2% (n=2) | 5.7% (n=2) |

Table 14 - Demographics of the survey respondents

As can be seen in table 14, the responses to this survey are not representative of the wider population of 13-24-year-olds in the UK, and do not intend to be as participants were self-selecting and not a nationally representative sample. However, they provide a snapshot into the perspectives of some British young people and help to provide initial understandings of how young people engage with sexual health information and digital resources.

⁷⁶ Response categories to which there were no respondents (n=0) have not been included in this table for the sake of conciseness, however the full spectrum of options were available to respondents as can be seen in appendices E and F

⁷⁷ Outside those included in the UK census categories. Categories such as Jewish, Hindu, Sikh, etc were all also individual options however they are excluded from this table as they did not receive any responses.

The findings in this chapter address the following research objectives:

O5) To understand how British 13-18-year-olds seek and share information about relationships, sex and sexual health

O6) To understand how British 19-24-year-olds seek and share information about relationships, sex and sexual health to engage in continued sexual health learning after leaving school.

This chapter breaks down the findings into three sections: Young people's seeking and sharing practices ([section 7.1](#)), response to influencers and sex edutainment influencer content ([section 7.2](#)), and young people's thoughts on digital media and data privacy ([section 7.3](#)).

7.1 Section 1 - Young people's seeking and sharing practices

To understand how YouTube sex edutainment content may or may not be suitable with young people's existing practices for seeking relationships, sex and sexual health information and sharing it with their peers, it is important to first understand these practices. To contextualise these practices, this section identifies respondents access to connectivity, devices, and social media sites, followed by their experiences of RSE. Subsequently, the ways respondents seek information about relationships, sex and sexual health are identified, before exploring their opinions around the sharing of sex, relationships and sexual health information.

7.1.1 Connectivity and devices

Young people in both age groups identified a high level of access to digital devices. 100% (n=50 and n=35) of both cohorts had access to the internet on a smartphone. Meanwhile 85.7% of 13-18-year-olds (n=42) and 94.3% of 19-24-year-olds (n=33) also had internet access on a laptop. 67.3% (n=33) of 13-18-year-olds and 40% (n=14) of 19-24-year-olds also had access to the internet on a tablet. It is important to note that although the findings suggested that all young people had access to the internet on a personal device, these results cannot be assumed to be representative as the surveys had a small sample size, of only 50 and 35 respondents respectively, and the use of an online survey may have provided a bias toward internet users.

When asked about social media use, 100% of 19-24-year-old respondents (n=35) used social media, whilst only one of the 18-24-year-olds identified that they did not use any of the social media platforms suggested. For 13-18-year-olds YouTube was the most popular social media platform with 89.8% (n=44) of respondents reporting use, followed by Instagram (83.7%), Snapchat (73.5%) and TikTok (63.3%). Whilst Instagram was the most popular social media platform used by those aged 19-24 (94.3%), followed by YouTube (85.7%), and Facebook (80%). In terms of accessing social media 95.9% (n=47) of 13-18-year-olds and 94.3% (n=33) of 19-24-year-olds used a smartphone as their primary method of accessing social media.

These findings suggest YouTube is a suitable site for 13-24-year-olds to access from a practical perspective due to the availability of internet-ready devices to them, the platforms popularity with both age groups and its option of having a smartphone app which suits the connectivity of the majority of respondents. In addition, the vast majority of young people in both cohorts are already engaging with YouTube, which indicates its use is suitable with this age group.

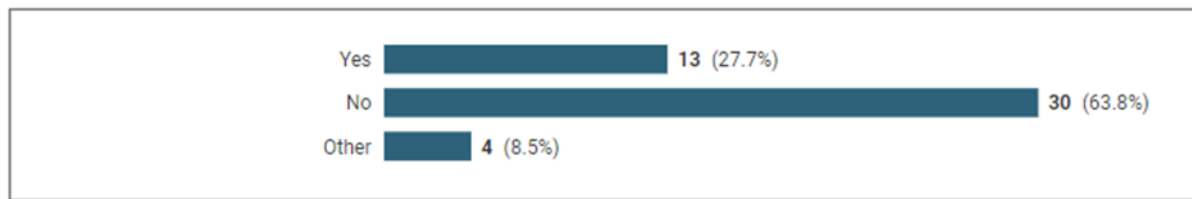
7.1.2 Experiences of sex education

Young people in both age groups were asked if their school lessons and parents/carers had given them all the information they wanted to know about sex and relationships, as young people may theoretically be less likely to seek out sex education information if they feel satisfied with the information received from these conventional sources of education. Asking questions around this also aids understanding if the literature identified in the literature review which showed gaps in provision was also reflected in young people's experiences and reported needs.

As can be seen below in figure 26 below, the findings from both survey cohorts were similar.

13-18-year-olds:

Q18. Do school lessons and parents/carers give you all the information you want to know about sex and relationships?



19-24-year-olds:

Q18. Did your school lessons and parents/carers give you all the information you wanted to know about sex and relationships growing up?

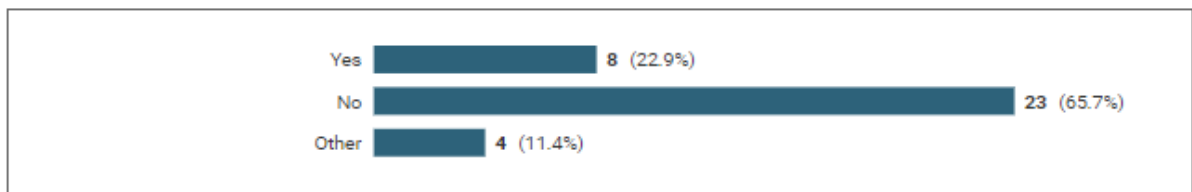


Figure 26 - Comparison of RSE experience

63.8% (n=30) of 13-18-year-olds and 65.7% (n=23) of 19-24-year-olds expressed that school lessons and parents/carers did not give them all the information they wanted to know about sex and relationships. 8.5% (n=4) of the younger cohort selected 'other' and their reasons related to having not been taught the topic yet or not knowing what they wanted from the topic, and two respondents identified that they had been taught 'To a certain extent...not full', as one respondent emphasised 'parents very little, school just basics or stuff they're required to tell us (stuff we usually already know)'. Meanwhile 11.4% (n=4) of the 19-24-year-olds also selected 'other' as their answer, and emphasised that their education met some of their information needs but contained gaps in information:

'Schools could do better... have boys and girls in classes at same time so can see each perspective, school deals too much on negative aspects and that sex is functional instead of part of a healthy, legal, consensual relationship.'

'To a certain extent, yes. However I was never taught about the sexual health problems that I happened to come across, nor how to have safe/pleasurable sex with a same sex or trans partner'

Finally, one respondent identified that their school education had been 'crap', but their parents had given them all the information they needed.

When asked about how their RSE could have been improved, 13-18-year-olds provided a number of suggestions. Although some didn't know how it could have been improved, others wanted more lessons and information as they felt under prepared by the education they had received. As one young person stated, *'The school do not teach sex education to the extent that I believe is required and so it doesn't really help anyone for the future as they underprepare us for what it will be like'*. Several young people mentioned the absence of LGBTQ+ content, one 17-year-old wanted *'More information on LGBTQ+ relationships, so that it gets normalised within schools and not thought of as a particularly foreign or weird concept'* and another suggested *'It could have been more inclusive of people who aren't in straight relationships'*

Young people also highlighted that they wanted better prepared and trained educators to deliver their RSE. One young person shared *'We had a French teacher who refused to use the word sex in our sex ed lessons teaching us- all schools should have someone comfortable with and properly trained in sex ed teaching it.'* This comment confirms the position noted throughout existing literature that RSE teaching can be impacted by educators own biographical experiences, moral beliefs and level of comfort (Kehily, 2002; Albury, 2013; Abbott, Ellis & Abbott, 2015, 2016; Young, Moodley & Macleod, 2019). Another respondent felt it would be beneficial to *'Speak to someone who has actually experienced things such as STI's'*. Young people felt that not only were their teachers sometimes ill-equipped for teaching RSE, but they were unaware of the realities young people were facing.

'Teachers don't always know what to say. My parents talk about respect and consent, so I know that stuff but I didn't learn it from school. Some boys in my year are really nasty around girls, I'm not sure the school knows what to about that.'

This comment fit within a wider narrative noted in the analysis of school-age young people feeling that their schools were not *'Educating us and preparing us for things that actually happen at our age/ things we need to know sooner.'* One 15-year-old added:

'As a 15 yr old, We don't get taught a lot of things like rape and sexual assault because we've been told it's not 'age appropriate' but the truth is that rape and sexual assault are happening to girls our age and we know about it just not from trusted people like teachers and professionals. So we feel a little bit unsure

when it comes to topics like this but also everything we have found out could be misleading.'

And another 15-year-old touched on this frustration:

'I feel that a lot of scaremongering techniques are used by schools surrounding the laws in place around sex that only seem to victim-blame rather than showing a victim how to seek help following an incident in something such as sexting. Furthermore, following the shocking results of the Everyone's Invited schools list⁷⁸, we should take action in ending rape culture within schools, beginning with awareness and education, leading to a much more stable help system for those who need it the most as well as people who are concerned about such topics.'

Another topic mentioned by several members of the 13-18-year-old cohort was around interruption of their RSE lessons due to COVID-19, with 35.4% of respondents (n=17) stating their RSE lessons had been affected by school closures. Some students identified that their lessons had moved online but they preferred *'Face to face interaction and proper teaching'*, emphasising that RSE would be *'better if some of it was done in person rather than online so you can create a discussion with classmates (about relationships specifically), so you're able to discuss issues fully and not just listen to a teacher tell you information which you most likely already know'*. As a result of the COVID-19 pandemic 25.5% of 13-18-year-olds (n=12) had used more online resources to learn about topics related to RSE.

19-24-year-olds expressed similar areas of improvement of RSE as the younger cohort, several identified learning the mechanics of sex but noted an absence of discourses around non-heterosexual relationships and pleasure, demonstrating that Lenskyj's (1990) observations about plumbing and prevention models of sex education appear to hold true even some 30+ years later. Examples of the gaps in provision respondents discussed included wanting to learn *'more about LGBTQ+ sex and not just straight relationships, also information on female masturbation'*, another stated they wanted to *'Not just talk about puberty and periods. Talking about safe sex, different types of sex etc. We learnt how to put a condom on a banana but what if you're not with a person who has a penis?'* a further participant added:

⁷⁸ The Everyone's Invited schools list is the result of a research project where young people could anonymously submit online their experiences of sexual assault and where it happened to expose rape culture – a list of named schools was then created and is publicly available at:
<https://static1.squarespace.com/static/5f22a93a4ca3bd10e8148771/t/60c12c3a95190e381ee755a6/1623272508283/EI+-+Primary+and+Secondary+School+Names.pdf>

'Be more open and honest not just about how to put a condom on! We didn't really learn about LBGTQ+ issues at all, we definitely didn't focus on anything to do with female pleasure which I think is really important and we didn't discuss the issues with sex and how it's not the same to everyone which is very important to realise'.

These comments support the literature in [section 2.2.4](#) that there are gaps in provision around LGBTQ+ RSE (Pingel et al., 2013; Abbott, Ellis & Abbott, 2015; Shannon, 2016; Terrance Higgins Trust, 2016; Hobaica & Kwon, 2017, Hobaica, Schofield & Kwon, 2019), and lack of discussions of female pleasure (Allen, 2006; Ringrose, 2013) discussed in [section 2.2.3](#). The comments also identify that the older cohort were more aware of the absence of female pleasure scripts in their RSE, something the younger respondents did not identify, demonstrating that this may become more of a priority for young people as they enter more sexual relationships and explore continued sexual learning post compulsory education.

Beyond this, the older cohort also provided detailed examples of how they felt their RSE had left them feeling ill prepared in the real world. This impacted their relationships as the examples below demonstrate:

'I thought a lot of abusive behaviour was normal. I wish someone had told me it wasn't.'

'Understanding lesbian safer sex practices (especially with a latex allergy) and the importance of testing. Safe sex practices in lesbian relationships is really uncommon, and advice guiding that conversation would have been great too. When I initiated these conversations with previous partners, they looked at me like I had eight eyes or that I was crazy. There was also a lot of biphobia brought up (accusations I was straight if I was talking about safe sex). I am 100 percent lesbian, so it was a bit awkward.'

'School didn't teach us anything other than using condoms, and didn't offer solutions to any sexual health issues that we could face.'

'Further information and open discussion. I didn't use contraception properly with my first sexual partner and now I look back thinking how could I have been so naive. This could have been avoided through more openness and information - possibly through schools. I went to a Catholic school so they didn't really do anything on it.'

'All of my sex education that I received was from school and it was all about the 'mechanics' and facts. [...] I was not taught what would be considered a healthy sexual relationship or the dynamics of it. I always understood about saying no to sex if I wanted to but not about pressures to take part in sexual activities or how to lay boundaries with a partner. I left believing that sex was initially a

magical thing (for your first time) but wasn't really about the pleasure of the female partner.'

These responses support Cook & Wynn (2020) and their observation that RSE left young people unprepared for the reality of sexual experience. In addition, the comments touch on another theme 19-24-year-olds identified, a lack of emotional preparation or discussion of relationships or emotions within sexual relationships. Respondents suggested their RSE would have been improved by containing '*More about deception and coercion in relationships*' and '*Talking about sex within relationships in sex education, rather than just sex as an abstract concept.*'

In terms of delivery of RSE, the older respondents had fewer comments, although they did mention that they wanted '*Actual facts! Given by real life people who were passionate and knowledgeable about the subject rather than awkward teachers trying to tick the right boxes*' and highlighted a need for '*More resources to look and ability to ask questions*'.

These findings support the literature from Pound, Langford and Campbell (2016) and Terrance Higgings Trust (2016) around the lack of emotional and relevant RSE and suggest that many young people feel underprepared by their experiences of RSE, and may therefore fill these gaps using alternative means to meet their information needs. Both cohorts expressed similar views and levels of dissatisfaction with their experiences of RSE and lack of LGBTQ+ inclusive content, however 13-18-year-olds identified more pedagogical-related issues and concerns about lack of education around sexual assault, meanwhile 19-24-year-olds provided examples of how they felt their RSE had not prepared them for the reality of their sexual relationships and participating in pleasurable relationships. This highlights that young people's needs around RSE may expand and shift as they move through from their teenage years into their twenties.

7.1.3 Seeking sex and relationships information

To understand the ways young people seek out sex, relationships, and sexual health information, the survey asked several questions to identify the processes, people and sources young people were most likely to engage with. When asked qualitatively '*If you*

have questions about sex, relationships or sexual health where would you be most likely to look for answers? 13-18-year-olds most popular answers were the internet (n=16 mentions in the qualitative responses), Google (n=13 mentions), Friends (n=12 mentions) and parents (n=11 mentions). Those who use the internet suggested they sought out *'reliable internet sources'* or *'websites our school gives us'*. Other, less common, sources 13-18-year-olds used to seek answers included family members (n=6), the NHS website (n=3), Teachers (n=2), Online forums (n=1), a partner (n=1), GP nurse (n=1) or sexual health clinics (n=1). One 13-year-old participant also responded that they would look *'nowhere'*, which may be due to a lack of interest in seeking information about these topics at that age.

19-24-year-olds asked the same question had similar responses with Google (n=18 mentions) as the most popular response followed by friends (n=13), NHS Website (n=6), and the internet (n=5). However, the role of parents (n=4) and family members (n=3) were less prevalent. Additional sources identified included partners (n=3), Reddit (n=2), blogs (n=1), Instagram (n=1), GP (n=1), Sexual health clinics (n=1), YouTube (n=1) and online medical journals (n=1). This suggests that the older cohort were more likely to use to internet and social-media-based sources than other interpersonal sources such as family and friends, whereas the younger cohort appeared to use a more balanced combination of both. In addition, it is interesting to note that only one respondent immediately noted YouTube as somewhere they would go for answers, discussion around this will be developed as additional data on this topic is revealed throughout this chapter.

Whilst 13-18-year-olds tended to provide shorter answers to this question, the 19-24-year-olds provided additional detail in their responses, shedding light on seeking processes:

'Generally my first reaction would be to google, I do also follow some women on Instagram who openly talk about these types of issues so maybe ask for advice through them. Depending on the questions, I would also speak to a GP.'

'I would do a google search and read through the top suggested websites.'

'Friends initially. Then perhaps internet sites that I trust- typically those which are based on science or that I have vetted previously'

'Google on private browsing mode, and my friends in person'

‘Google - so most often I’ll end up on the NHS website or articles/blogs offering advice and explanations of things in layman’s terms’.

These responses give an indication of some of the factors that may be important to young people as they seek out information, whether these be the reassurance of being able to use private browsing modes, using Google to locate top suggested sites (and thus trusting the underlying algorithmic sorting processes), or using one’s own existing knowledge for vetting websites and social media personalities that are trusted by the individual.

When asked *‘have you ever used the internet to find out information or answers about sex, relationships, or sexual health?’* 66% (n=31) of 13-18-year-olds and 94.3% (n=33) 19-24-year-olds selected yes, demonstrating that use of the internet is prevalent in seeking sex and relationships related information for young people, specifically within the older age group. This difference between the two age cohorts could possibly be explained if the youngest respondents had not yet encountered reason to use the internet for this sort of information due to lack of relationship or sexual information needs, however this is conjecture, and it is not possible to know the reason clearly from the data.

Young people were also specifically asked where they would look if they were looking for sex, relationship, and sexual health information **online**. Whilst the earlier question of where young people would look for answers if they had questions gathered their immediate thoughts on how they sought information and included the option for non-digital sources, this question was used to provide deeper understanding of digital resources being used. The most common answers provided in the qualitative data from 13-18-year-olds were the NHS Website (n=13 mentions), Google (n=11 mentions) and trusted reliable websites (n=6 mentions) however several participants (n=5) expressed that they didn’t know where they would look. Respondents also mentioned other sexual health charities/ organisations including Brook⁷⁹ (n=1), other support organisations such as Childline (n=1), NSPCC⁸⁰ (n=1), Samaritans (n=1), and social media platforms YouTube (n=3), reddit (n=1) and TikTok (n=1). Other sources included online women’s health websites, sexual health or advice forums and teen-specific websites. 19-24-

⁷⁹ Brook is a British sexual health charity for young people aged under 25. Available at: <https://www.brook.org.uk/>

⁸⁰ National Society for the Prevention of Cruelty to Children. Available at: <https://www.nspcc.org.uk/>

year-old respondents had very similar answers, citing the NHS website (n=16) and Google (n=14) most commonly. Social media sources were next most popular with Instagram (n=3), Reddit (n=3), forums (n=3) and YouTube (n=2), as well as TikTok (n=1) all mentioned. Respondents also used sexual health clinic websites (n=2), peer reviewed journal articles (n=2), Web MD (n=1), Centre for Disease Control (n=1), planned parenthood (n=1) and other organisations or medically approved blogs. We can see that when asked specifically about online information seeking the number of mentions of YouTube across both cohorts changed from n=1 to n=5, however this is still a small number and only 5.8% of the total combined respondents. Yet it is interesting to consider how YouTube content may possibly fit into other platform searches. Google was a common answer for both cohorts for where they would seek information, however as Google and YouTube share the same parent company, the first page of search results on Google often contains a 'videos' section which displays small thumbnails of YouTube videos the algorithm has suggested as relevant. It is not clear from the data if young people looking for information on google end up viewing YouTube resources this way, however the data suggests that young people are starting with either specialist health organisations such as the NHS or using generic platforms (e.g., Google or social media platforms) to search and find relevant content specific to their sexual health information needs.

Young people in both cohorts engaged in their own processes of evaluating content and sought what they considered to be reliable sources. As one 15-year-old respondent stated: *'I have found The Cosmopolitan online magazine to be honest in its information. However, if I was looking more for professional and health advice I would use an NHS website or a service such as Childline.'* Another stated, *'For something health related I'd probably start on the NHS website'*. Many respondents made it clear that they were seeking trusted websites or sources that they recognised in their search for information online, one respondent stated they looked for *'Trusted websites that are known to be correct and useful'*, while another added *'I'd just google and see what sites I've heard of. Like Nhs or bbc or something'*.

Some older respondents used social media as part of their information seeking practices but also expressed caution in choosing sources; *'reddit for relationship discussions (although with a pinch of salt and a critical eye as random internet people*

are not experts to hold your life accountable to)'. Those using social media appeared to preference specific influencers who they had an established trust in. For example: *'I would look on tiktok because there's this user with trustworthy information'* and another suggested they would look *'At authors of books I've read (Emily Nagoski etc), Hannah Witton YouTube, Sex positive Instagramers, And then see if they have any recommendations'*. Meanwhile younger respondents also sought the lived experience of others through social media, stating they would *'just google it, look for youtube videos of people explaining their experiences'*, or use *'Trusted Facebook groups, r / sexeducation and trusted YouTube sex-ed channels'*. These findings demonstrated that in both cohorts, young people provided similar answers and similar levels of consideration over the resources they sought, although the older respondents mentioned social media platforms more than the 13-18-year-olds. In addition, 19-24-year-olds did not have any 'don't know' answers compared to the younger cohort who had n=5, suggesting that they may have more confidence or interest in locating sources of sex and relationships information online.

These findings around sex and relationships information seeking highlight that young people seek this information from a range of sources, both through interpersonal influencers such as parents, family, and friends, but also frequently use the internet to seek information from a variety of sources. Table 15 below demonstrates how the young people utilised a range of health influencer sources by plotting some of the examples young people gave against the health influencer framework:

| Segment of health influencer scale | Health influencer type | Respondent sex information sources |
|------------------------------------|-----------------------------|--|
| Digitally mediated influencer | Mega-influencer | Hannah Witton |
| Digitally mediated influencer | Influencer | Emily Nagoski |
| Digitally mediated influencer | Micro-community influencers | r/sex education (Reddit) Facebook groups Forums |
| Professional influencer | Organisations | NHS website Childline BBC website Web MD Planned Parenthood Samaritans Brook NSPCC Cosmopolitan online |
| Professional influencer | Healthcare professionals | GP Sexual health clinic GP nurse |
| Interpersonal influencer | Community influencers | Teacher |
| Interpersonal influencer | Interpersonal influencer | Friends Parents Partners |

Table 15 - Young people's sex and relationship information seeking mapped against the health influencer framework

Using the health influencer framework we can see that young people's sex and relationship information is fulfilled by a variety of different health influencers, from mega-influencer YouTube sex edutainment influencer Hannah Witton, to organisational influencers such as the NHS website, and the interpersonal influencers of friends and parents. This demonstrates that influencers can fit in with other forms of health influence, to complement existing information sources.

However, YouTube did not appear to be a common source of information, and other social media platforms like reddit or forums that utilise micro-community influencers in the health influencer framework had similar usage to YouTube, as did platforms like Instagram. The lack of uptake on YouTube may be due to challenges discussed in the walkthrough ([section 5.2](#)) around 13-18-year-olds accessing sex edutainment content, and this will be explored further in sections [7.3.3](#) and [7.3.4](#) while discussing young peoples perceived benefits and problems of using YouTube to access sex, relationships and sexual health information. Both age groups provided similar answers

around seeking sexual health information, relying heavily on the internet and peers for information, however the older cohort were less likely to rely on family and had an increased emphasis on the use of the internet or google in comparison to the younger respondents.

7.1.4 Sharing sex and relationships information

Having developed an understanding of some of the ways young people seek information about relationships, sex and sexual health, this research sought to identify how young people connected with others around these topics, both in sharing their own personal concerns and supporting their peers through the sharing of information. This is to help inform the understanding of how YouTube sex edutainment may fit into existing sharing practices and if it could have potential as a form of peer education resource.

83.3% (n=40) of 13-18-year-olds, and 51.4% (n=18) of 19-24-year-olds identified that they would tell friends if they were worried about something to do with sex or relationships, in comparison 52.1% of 13-18-year-olds and 22.8% who would reach out to a parent. This highlights peers can be a key source of information and support for sex and relationship matters. However, some respondents highlighted that they did not have anyone they would talk to:

'I don't have anyone currently that I trust to discuss this with or anyone that I'm comfortable to talk to about this. I would seek any information I could from the internet and deal with the issue myself. I'm not in the position where I could talk openly to anyone without judgement or bias.'

Only n=1 13-18-year-old identified that they had no-one to talk to, compared to n=5 of the older respondents, suggesting that some of the older cohort had fewer support structures around them to discuss sex and relationships. Another older respondent suggested that although they talked to their partner about everything, this was not necessarily the most reliable advice:

'I try to talk to my partner about everything, but sometimes they are just as clueless as I am haha. I don't often like talking about my sexual health with anyone, I'd try to sort it out myself by consulting a GP - but only when it is causing me serious issues in my daily life, otherwise I just write it off as me'

being paranoid. With sex and relationships I have one friend whom I feel comfortable with discussing these things with, but I can't see them all the time anymore.'

To understand how young people go about supporting their friends when presented with a situation, survey participants were given two scenarios and asked what they would do⁸¹. The first related to supporting a friend who was being pressured about sex. Most 13-18-year-olds said they would encourage their friend to talk to their partner, emphasise that they are not ready and should only do what is right for them. Three respondents suggested that they would also recommend their friend talked to an adult, one was unsure. None suggested looking for information or resources on the internet, identifying that in some circumstances young people do not necessarily look to the internet. When presented with the same scenario, 19-25-year-old respondents demonstrated a well-informed knowledge of consent and sensitive awareness of the situation. Whilst several comments suggested they would encourage their friend to leave the relationship, the answers were more nuanced than the younger cohort, with many acknowledging the complicated nature of communication within a relationship and how they would sensitively discuss the coercive nature of the situation. Several comments suggested that they might refer the friend on to charities, therapists and other specialists if required. However, as with the younger cohort, no respondents suggested that they would look for information online to help them in supporting their friend, although one respondent did suggest that after talking, they would *'Perhaps give websites of organisations that can help'*. These findings suggest that while young people do use the internet to seek information about sex and relationships, it may not be their first thought when supporting peers.

The second scenario presented to young people was *'Your friend has told you they think there might be something wrong with them because they don't feel sexual attraction. Whilst scrolling YouTube you come across a video of someone talking about exactly what your friend told you. What do you do?'* Most 13-18-year-olds (n=25) mentioned that they would send the video to their friend, suggesting they would *'Send her the video so she doesn't feel alone'* or *'Send them the video and some advice*

⁸¹ The scenarios were asked before young people were exposed to questions about using the internet to find information, to identify how many young people immediately identified digital content as a part of their strategy when supporting a peer without being biased by the survey contents

websites'. However, many (n=14) expressed that they would watch the video themselves and tell their friend about it verbally. As one respondent stated, *'I would watch the video myself and then explain the information from the video but in my own words to them'*, another said they would *'Mention it to them and if they want to see it, forward a link (or show them on my device) to support them.'* Some felt that it depended on the video in question, *'It depends. I might share it with them privately. But only if I thinks it's nice, not if it's mean or shameing'* or emphasised the importance of the source *'Depends on who the video was by and whether they are trustworthy'*. Two respondents stated they would not send the video, with one cautious about the content source, *'I wouldn't do anything or perhaps say I've seen it but that's it. I don't trust that info.'*, the other would *'Think of it as coincidence and move on'*.

The 19-24-year-old respondents had a similar response to the younger cohort, the most common response was to send it to the friend (n=14 mentions), with respondents stating they would *'Send it to them and tell them I support them no matter what'* or *'Send it to them privately'*. The next most common response was to watch the video themselves and share insights in person (n=8) or to mention it first then send the link if the friend wanted it (n=4). These respondents felt this was a more sensitive way to establish a personal connection and ensure that they were being sensitive to the person's needs without providing unsolicited advice;

'I would mention the video to them the next time I spoke to them in person, clarify if they feel the same as the individual in the video. Try to be comforting and reassuring. I would try to avoid saying that this is what they are or are experiencing and see what they believed on the topic. I wouldn't want them believing I was labelling them so I would take a helpful And careful approach.'

'Send this to my friend and or personally share the information I have found with them if I am to see them in the near future as I believe a personal conversation is more helpful'

'I ask the friend if they want to talk about it, and then say I found a useful video if they want to search it up themselves or I can send the link so they don't have past messages of me sending it if they're not comfortable.'

Some respondents (n=5) highlighted they would watch the video first to assess the content before deciding to send it, one respondent stated they would *'Watch the video and see if the content is affirming and factual before deciding whether to pass it on'*. Others felt that it depended on the friend in question (n=2), e.g. *'I would not say that*

there is a need for youtube videos to be shared in this situation [...] I would definitely share some if I felt that is what this friend needed-- but only if the tone and accuracy of conversation is suiting.' Three respondents also stated that they would not send the video, stating that they *'Would talk to them more generally wouldn't share a YouTube video'* or *'I wouldn't share it as it may be misleading'*. One respondent also felt that with this topic video content may not be helpful:

'I would not send them it, sexuality is not something that has to be on the forefront of your mind and watching these people share their story when you don't even understand yours often leads to shut books. If someone is feeling this way then they have to explore those feelings before looking to other people.'

Participants were also asked if they found a social media post or video about a sex or relationship issue that they knew a friend was having, would they share it with them, and how? Respondents' answers mirrored sentiments found in their earlier answers but provided some additional insight into their thought processes about sharing sex, relationships and sexual health content with their friends, and their choices around how to send the content. Several respondents demonstrated a sensitivity to ensuring that the sharing of content would not be disrespectful or make their friends uncomfortable, for example one respondent in the younger cohort said *'I would let them know but if they appear uninterested I wouldn't take it further.'*, while another in the 19-24-year-old survey identified they might send the video, *'Possibly if they had asked for help and I didn't know anything on the subject. I would find it rather disrespectful to send them a video as it's quite informal.'* Another older respondent emphasised a duty of care in the sharing of content,

'I think I would if I thought the video was genuinely helpful and wasn't just going to make them feel worse. I would preface it with that I saw this video and thought it might be useful to them, and I would apologise for possibly making them feel uncomfortable by sharing this with them'

These responses suggest that some young people are consciously aware of the social and emotional consequences of sharing information about sex and relationships with their friends and may exercise caution in choosing if or when to share content. Another area where caution was expressed was in how young people would share information, with all those who stated they would share content emphasising that this would be done through private channels, e.g., *'I would send it to them using a private messaging*

function on said social media platform, *'Privately via WhatsApp would be the way I shared it if I decided to do so'* and *'via private message not public tag'*. These private channels included WhatsApp, text message, Facebook Messenger, and direct messaging on other social media platforms (such as Instagram, Snapchat, TikTok). Highlighting the importance to young people of having private avenues to discuss these sensitive topics and share information about them where they cannot be seen by others.

Finally, when asked *'if you found a social media post/video about a sex or relationship issue that you knew a friend was having, would you talk to them about the information the video contained/use it to pass on advice?'* young people responding to both surveys were likely to do so, with 87.5% (n=42) of 13-18 year olds and 79.4% (n=27) of 19-24-year-olds selecting 'yes'.

These findings related to the sharing of sex, relationships and sexual health information highlight that young people utilise their peers for support around sex and relationships, but also are engaged in digital sharing practices with their friends when it comes to discovering this information. This information is valuable in understanding if YouTube sex edutainment information might be suitable as a form of peer education and supports this suggestion. Young people may not immediately plan to use this material in supporting their friends and may try to be selective about the suitability of content they share, but the vast majority of young people are willing to share content they feel will be helpful to their friends.

7.2 Section 2 - Response to influencers and their sex edutainment content

To understand the suitability of YouTube sex edutainment content to young people, the survey identified how prevalent the following of influencers was amongst young people and their feelings about influencers.

Participants were asked if they followed any people on social media who could be considered influencers⁸², as well as if they watched any videos made by YouTube influencers. As can be seen in table 16 below, the majority of young people in both

cohorts were following influencers and watching influencer content on YouTube:

| 13-18-year-olds | | 19-24-year-olds | |
|--|--------------------|--|--------------------|
| Follow influencers | | Follow influencers | |
| Do not follow any influencers | | Do not follow any influencers | |
| 79.6% (n=39) | | 82.9% (n=29) | |
| 20.4% (n=10) | | 17.1% (n=6) | |
| | | | |
| 'Many influencers' ⁸³ | 'Some influencers' | 'Many influencers' | 'Some influencers' |
| 32.7% (n=16) | 46.9% (n=23) | 28.6% (n=10) | 54.3% (n=19) |
| Watch videos made by YouTube influencers | | Watch videos made by YouTube influencers | |
| 75.5% (n=37) | | 62.9% (n=22) | |

Table 16 - Young people following influencers and watching influencer YouTube videos.

When asked why they enjoyed following influencers, the most common themes expressed by both age cohorts were because they were interesting, young people enjoyed their content, following people with similar views to them, liked their niche interest topics, and used them to keep up with gossip and trends. Young people appreciated the knowledge influencers had around their interests, citing *'Often they're knowledgeable about things that I am interested in e.g. haircare, skincare'* and their *'Particular expertise, life advice'* as drawing them to the influencers they liked.

Some appreciated finding influencers who shared their interests, such as *'Most of them are body positivity influencers or political influencers- they speak about topics that interest me'*, whilst others felt a connection with influencers due to this similarity, *'I follow influencers who I believe to represent part of myself or what I believe in. I like to see that people who are similar to me can prompt social change'*, and another emphasised *'I can connect with the person emotionally and I can relate to the content*

⁸² For the purpose of the survey this was identified as *'a person who creates public content on social media with a large following (for example, over 40,000 followers) that you do not personally know.'* The questions for this survey were designed and piloted before the health influencer framework was developed, for this reason the definition of influencer does not match those identified in the framework developed in chapter 6, my thoughts on this can read in section 8.5 where during the discussion of challenges and limitations of the research.

⁸³ The question did not provide a definition for how many 'some' or 'many' influencers might be, for this reason it is important to note that young people may have interpreted this question differently.

that they make. I really enjoy watching someone that I have things in common with discussing things that I am passionate about, it makes the experience more enjoyable than discovering it on my own.' These comments link with Esch et al.,'s (2018) suggestion that audiences perceived similarities with an influencer, make the influencer more likely to be considered trustworthy. The similarities and shared interests discussed by respondents create opportunities for parasocial relationships to form that may be useful in a sex education context if these relationships can be formed with sex edutainment influencers.

Some felt that influencers were inspiring individuals, describing them as *'inspiring and motivating'* and *'a positive influence on myself'*, or someone they that they *'aspire to be'*. Others were drawn to influencers due to an interest in them as people stating they *'like their personality'* and want to *'see what they are doing and what's happening in their life'*, in some cases this depended on how long they had been following the influencer as to how invested they were in their life, as one respondent illustrated, *'Depends on the influencer, some I like the content they create or I have followed them for so long I am now interested in their life'*, for some it also gave the opportunity to feel connected to someone they looked up to, *'if it's a music artist I admire it's just nice to feel closer with them'*. These findings are similar to those in [section 6.3.2](#) where some commenters on sex edutainment influencer videos viewed the influencers as role models and appeared to have developed parasocial relationships with them.

Some respondents also appreciated the value they received from influencers as educators, stating they followed *'To learn about different things'* and *'I like to follow influences who provide me with education. E.g nursing pages, medical pages.'* Whilst others were not seeking education, they utilised influencer recommendations *'To find cool places to go or nice things to wear'*. Finally, respondents followed influencers for the social value in being up to date on their lives and content, one participant expressed *'It's a nice conversation starter with friends'*, another said they followed influencers *'Because everyone does'*. These responses give some insight into the media utility young people receive from following social media influencers.

However, for the small number of respondents who did not follow influencers, some actively disliked the idea of following just because everyone else does, this was because they viewed themselves as *'an independent individual'*, or *'I am my own*

person and not a follower', with another adding *'I don't follow trends like that. It puts me off tbh'*. Meanwhile some were not interested in social media, keeping their accounts to only family and friends, or stating *'I don't actually know who they are'*. Another respondent highlighted *'They're bad for my mental health - in anorexia recovery'* as a reason they did not engage with social media influencers, suggesting influencer cultures were not helpful or healthy for them. A small number of respondents also had strong opinions against influencers:

'Don't give two hoops about influencers as everything they promote is to increase there image or promote products they have been given for free or a fee in which they would probably not have looked twice at before'

'The entire influencers concept is vile. They are vile, shallow, narcissists'

'Most of them are paid puppets who would sell their soul for money and likes'

This criticism of influencers as being focused on selling products and making money is important when considering influencers role in sex education and their suitability for young people. When asked if they had ever felt influenced to buy something because an influencer had shared or recommended it 43.8% (n=21) of 13-18-year-olds and 58.8% (n=20) of 19-24-year-olds said they had. These criticisms raise issues around trust of influencers and their motives. As discussed in the literature in [section 3.4](#) trust is a key concept to understand in this research as for influencers to act as peer-educators, or for their content to be disseminated between young people, they first need to be trusted by their audiences as authentic and providing accurate content.

When asked if they trusted influencers, young people's answers in both age groups were strikingly similar. As can be seen below in table 17, those who followed influencers had greater levels of trust in influencers compared to those who did not follow them, however this trust was not placed in all influencers and the vast majority of young people in both cohorts following influencers trusted some, but not all of the influencers they followed. Those who did not follow influencers predominantly did not trust influencers, although a small proportion identified that they still trusted some influencers. A small proportion of each cohort also stated they did not know any influencers.

| 13-18-year-olds | | 19-24-year-olds | |
|---|--------------|---|--------------|
| Young people who follow influencers 'Do you trust the influencers you follow?' | | Young people who follow influencers 'Do you trust the influencers you follow?' | |
| Yes | 27.6% (n=8) | Yes | 25.6% (n=10) |
| No | 13.8% (n=4) | No | 20.5% (n=8) |
| Some, but not all | 58.6% (n=17) | Some but not all | 53.8% (n=21) |
| Young people who do not follow influencers 'Do you trust influencers?' | | Young people who do not follow influencers 'Do you trust influencers?' | |
| Yes | 0% (n=0) | Yes | 0% (n=0) |
| No | 55.6% (n=5) | No | 66.7% (n=4) |
| Some, but not all | 22.2% (n=2) | Some but not all | 16.7% (n=1) |
| I don't know of any influencers | 22.2% (n=2) | I don't know of any influencers | 16.7% (n=1) |

Table 17 – Trust in influencers comparisons

When asked what made an influencer trustworthy or untrustworthy, the most common theme expressed by both 13-18-year-olds and 19-24-year-olds was being open, honest, and transparent about themselves and their lives. Young people placed value on demonstrations of authenticity suggesting that *'Trustworthy influencers are honest and show the realities of their life'*, and *'show the reality and not just the highlights'*. As one respondent emphasised:

'I think that influencers who are trustworthy are true to themselves while they present themselves online. They are authentic and stand for what they believe in while showing that life is not the perfect life that many social media influencers lead us to believe. An untrustworthy influencer is somebody who therefore is not their authentic self when presenting online and refuses to admit to the harder parts of life, which we all inevitably go through.'

Another added:

'I find that influencers who are very open about their life on social media are often more trustworthy rather than just showing the 'good' snippets of life'

This emphasis on honest self-representation and authenticity was one of the reasons some respondents felt that influencers were not trustworthy, one young person stated, *'I don't think any influencers can be fully trustworthy! there's always going to be something fake online'*, while another felt influencers were untrustworthy because of *'The false act they can pursue online'*. Another element of how influencers behaved online that was important to young people was how they interacted with their audience and other people; one respondent felt that trustworthy influencers could be identified

by *'How they interact with people. The way they display their content. If they are more relatable. If they are able to talk about tough topics or bad experiences they have dealt with to raise awareness'*, whilst another noted that *'Taking responsibility for actions /being aware they have an audience. Being open on discussion of topics'* were all identifiers of a trustworthy influencer. Meanwhile an influencers behaviour and reputation were seen as indicator of trustworthiness, *'An influencer seems untrustworthy to me when they have been involved with different bad dramas and scandals etc'*.

Respondents also valued how well evidenced their content was, emphasising *'Their education & background'*, and preferring *'a solid network around them who are validated as informed members of communities/industries'*. Young people also queried *'Whether the information they share is backed up with evidence'*, wanting *'Evidence, not bigoted and biased opinions'*. and influencers to *'share information based on up to date guidelines'*. This demonstrates that some young people do engage in an assessment of suitability of the content they view and use this to develop their opinions on content creators.

The biggest issue of contention around influencers and the trustworthiness was their participation in advertising. Some suggested that what made influencers untrustworthy was, *'just selling/advertising stuff in every post'* or that *'they're being paid to flog something'*, and this led to influencers *'Being a sell out. Doing paid ads all the time without engaging with their following normally.'* Another identified that *'Ads that they don't properly disclose are untrustworthy'*. Some felt that the presence of advertising and influencers' ability to make money from the audiences made them and their intentions inherently untrustworthy, stating *'They are more worried about there image and succes and making the bucks than being in the real world'*, or that *'They're only doing it for the money so the products they promote may not be that great'*. These responses demonstrate that ways influencers fund the creation of their content can be problematic to young people. Considering the challenges that Sex edutainment influencers interviewed in [section 6.2](#) discussed around funding their content and that private advertisers appeared to be the only organisations offering funding due to YouTube demonetisation of their content, this may be a problem for YouTube sex edutainment.

However, several young people did not necessarily think that advertising in itself made an influencer untrustworthy, but trustworthiness depended on their practices, morals and ethics around advertising. One respondent stated that trustworthy influencers *'do Ads that fit with their morals rather than constant unrelated Ads e.g a self love account promoting diet shakes would be inappropriate.'* Another suggested influencers could do trustworthy promotions if they were honest about why they were promoting things but untrustworthy influencers *'just take deals to get free things and promote things they don't believe in'*. One other respondent felt that trustworthy influencers *'recommend products and businesses that they are actually using rather than sharing it for their own gain.'*

However, young people in both cohorts had a clear caution about the presence of advertising, one older respondent emphasised the personal-responsibility they felt to be aware of influencers motives, *'some things are dependent on yourself, for example i am aware in myself that some things are paid to be spoken about'*, another 13-18-year-old respondent noted the challenge in recognising advertising from influencers which made them less trusting, *'They're sponsored, the advertising isn't obvious so you don't know when it's happening'*. These findings indicate the presence of advertising may destabilise the credibility and perceived trustworthiness of influencers, as one respondent succinctly stated, *'If they push products by well known companies then I might trust them less'* and another emphasised, *'If they are being paid for content promotion I do not trust them, as they are ultimately bias from being paid by a company for content'*. Yet, for two respondents advertising made an influencer more credible; one stated *'They have lots of followers and they seem nice. Company's pay them so they must be trust worthy'* and another mentioned *'People would not sponcer or send them things if not'*, suggesting that some young people may view adverts and brand collaborations as a positive thing. However, the overwhelming response from young people towards advertising by influencers was one of distrust. Finally, some young people identified they did not trust influencers as they didn't know them personally, demonstrating that not all users build trusting parasocial relationships with influencers.

When it came to YouTube sex edutainment influencer content, 12.5% (n=6) of the younger cohort and 37.1% (n=13) of 19-24-year-olds stated they followed or watched videos by influencers who post about sex, relationships, or sexual health. Compared

to those following influencers this demonstrates that YouTube sex edutainment influencers are not as widely viewed, although 22.9% (n=11) of 13-18-year-old respondents and 40% (n=14) of 19-24-year-old respondents stated they had viewed a YouTube video on sex and relationships to get advice. These figures show that respondents predominantly do not use YouTube as a resource for sex and relationships information, however, the higher percentage of 19-24-year-olds utilising this content may be due to their increased need for resources as they enter sexual relationships, and the need for independent learning after their school-based RSE. Data was not gathered on why young people did not engage with this content therefore we do not know if this lack of usage was due to respondents being unaware of the availability of sex edutainment content on YouTube, if they felt it was not relevant to their information needs, or if they did not feel YouTube was a suitable platform for finding information. However, respondents opinions on the benefits and problems of using YouTube to access sex, relationships and sexual health advice and information are discussed later in this chapter in sections [7.3.3](#) and [7.3.4](#)

7.3 Section 3 - Benefits and concerns about digital sex and relationships content

The use of digital content for sex education requires young people to conduct their own assessments of the benefits and risks of content. The survey sought to understand what young people feel are the benefits of using the internet and YouTube to find information about sex, relationships, and sexual health, and what their concerns were with this method of seeking information. The final segment of this chapter identifies young people's perceived benefits and risks of using the internet, and YouTube, to find sex, relationships and sexual health content, and their thoughts on social media data privacy. The findings below suggest that young people have critical awareness around both the benefits and problems of digital media consumption of information online, and particularly misinformation.

7.3.1 Perceived benefits of using the internet to access sex, relationships and sexual health advice and information

When asked about the benefits of using the internet to find out information or answer questions about sex, relationships or sexual health, the most common themes found from 13-18-year-olds were access to a greater range of answers and information, that it was less embarrassing, private/anonymous, and easy to access. The full break down of themes found in the data can be seen in Table 18 below:

| Themes related to benefits of using the internet (13-18-year-olds) | | | |
|--|----------------------------|----------------------|-------------------------|
| Greater range of answers/Information* | Less embarrassing | Private/anonymous* | Accessible* |
| 16 mentions | 11 mentions | 8 mentions | 6 mentions |
| Lived experiences of others* | Don't need to ask an adult | More direct answers | Makes you more informed |
| 4 mentions | 4 mentions | 5 mentions | 3 mentions |
| Access to trusted sources | Non-judgemental | Easier to understand | Don't know* |
| 4 mentions | 3 mentions | 1 mention | 1 mention |
| *Theme also mentioned by the other cohort | | | |

Table 18 – Themes related to benefits of using the internet to find out information or answer questions about sex, relationships, or sexual health (13-18-year-olds).

13-18-year-olds were aware that parents and teachers sometimes acted as gatekeepers to information and identified that online they were able to access a broader variety of information, one young person emphasised:

'You get a much more honest answer on the questions that you ask. It can be found that parents and teachers tell you what you need to be told but don't explain things that are perhaps more taboo. Online you can also read from people's own experiences - something which would be awkward with teachers or parents'

For this reason young people valued the variety of information available online as *'The amount of knowledge on the internet is phenomenal, and you are extremely likely to find a post that someone has made that relates to your precise situation'*, whilst others highlighted that *'You can find good information you probably cant access in person'* and *'you can find out things they don't teach you in school'*. One young person stated that having access to all this information could help in creating informed opinions as *'You can read the opinion of many people and form your own opinion confirming it with facts.'* Some young people also valued being able to discover the lived experiences of

others as *'Real life experiences help more and other peoples stories'* and allowed them to *'Learn from people our age'*.

Many highlighted that the internet allowed them to avoid embarrassment as *'You don't have to be embarrassed to ask an adult'*, and that they valued using the internet *'because it's too embarrassing to ask anyone else'*, as the internet is *'Anonymous and convenient'* and *'a space for strangers to be real and open and you can do it alone'*. One respondent suggested *'some people may not feel comfortable with talking to their parents or trusted adult and google might be their only choice'*. Another reason young people appeared anonymity was to avoid perceived judgement as *'there is less judging'* and the internet was perceived to be *'Non judgmental, [with] varied answers about topics people close may not understand'*. Being able to do their own research also allowed some young people to avoid embarrassment when they did feel ready to talk to others about the topic because *'It makes it easier for me to talk about it if I already have an idea on what the answer should be and I wouldn't feel so stupid'*.

19-24-year-olds also focused on several of the same benefits as their younger counterparts (see Table 19 below):

| Themes related to benefits of using the internet (19 – 24-year-olds) | | | |
|---|---|--------------------|------------------------------|
| No shame/ judgement / embarrassment* | Greater range of answers/Information* | Private/anonymous* | Lived experiences of others* |
| 17 mentions | 12 mentions | 8 mentions | 5 mentions |
| Accessible | Free to access | Open and honest | Inclusive |
| 4 mentions | 2 mentions | 2 mentions | 2 mentions |
| None | *Theme also mentioned by the other cohort | | |
| 1 mention | | | |

Table 19 - Themes related to benefits of using the internet to find out information or answer questions about sex, relationships or sexual health (19-24-year-olds).

Whilst the younger respondents focused more specifically on embarrassment, the older cohort made more references to the lack of judgement as the internet came with *'no shame'*. Respondents stated that *'You don't get judged for asking'*, with *'no embarrassment or judgement'* and *'takes away the shame that some people may feel.'* One young person highlighted, *'There is no judgement when I am searching for answers as I am the only person who knows my questions or that I have questions.'* Another felt they benefitted from *'Free access to information without shame attached'*, This ties in with the literature explored in [section 2.1.3](#) that suggested that traditional

experiences of RSE can be tinged with shame and embarrassment for young people, and that they may see the privacy and anonymity of the internet as an antidote to this. Young people appreciated the private nature of the internet as *'being able to search anything online means you can keep your issue private if you are uncomfortable or embarrassed talking about it with others'*.

19-24-year-olds provided more depth around what they felt the benefits of having access to the lived experience of others were. Several felt that *'Anonymous forums offer different stories from others who could be experiencing a similar issue.'* As this meant *'I get to see if there are people out there in similar situations to me.'* One respondent emphasised that this made them feel validated as *'There are so many forum answers that there is always someone relatable to you. Makes you feel like you're not alone/weird'*. Another stated that finding the lived experiences of others in a similar situation could be preferable to talking to friends because *'It's easier to find people who have the specific struggles/questions you do rather than friends speculating'*. An additional benefit suggested around this theme was the ability to *'find community in other people's experiences that they have shared.'*

Older respondents also felt the internet was *'accessible'* and *'easy'*, in some cases this was because *'I can get varied answers instantly and anywhere, so I don't have to wait to see someone and have a discussion.'*, others emphasised the internet's speed and convenience in contrast to accessing local health services. One stated *'It only takes a few seconds to look something up, but getting a consultation with a doctor can take weeks, especially during the pandemic'* and another emphasised *'most people could not tell you the location of their local sex clinic, but the internet allows them answers to their questions without having to go out their way to see a specialist.'*

A few respondents also suggested that the inclusivity of content was more specialised for LGBTQ+ individuals than might be found at schools or their GP. One respondent who identified as a lesbian wrote that there was a:

'Wider range of information that is more than inclusive. It is rare to hear someone talking about LGBTQ sexuality in any educational setting or doctors office. Sometimes, especially for younger people, the internet is the best source to get the information needed about safe sex practices, sexuality, STD transmission specific to sexual orientation, and prevention-oriented materials'

And another stated, ‘You can get a wider range of views on sex/relationships, rather than “traditional” and heteronormative views that are normally taught in school’. These findings suggest that young people value the openness of the internet to address gaps in existing RSE learning and gain access to information quickly and easily. Some appreciate the ability to situate their experiences in the lived experiences of others, and others feel the internet offers opportunities to explore sex and relationships topics without embarrassment, judgement, or shame due to the anonymity the medium affords.

7.3.2 Perceived problems of using the internet to access sex, relationships and sexual health advice and information

When asked about the problems with using the internet to find out information or answer questions about sex, relationships or sexual health 13-18-year-old respondents showed an overwhelming awareness of the possibility of misinformation online, alongside the following themes in table 20:

| Themes related to problems of using the internet (13-18-year-olds) | | | |
|--|--|--------------------------------|---|
| Misinformation* | Possible exposure to explicit content* | Biased information | Trolling/online abuse |
| 32 mentions | 9 mentions | 5 mentions | 1 mention |
| Being hacked | Overwhelming amount of information* | Don't know who created content | Exposed by the algorithm |
| 1 mention | 1 mention | 1 mention | 1 mention |
| May only show worst case scenario | May not be applicable to everyone | None | *Theme also mentioned by the other cohort |
| 1 mention | 1 mention | 1 mention | |

Table 20 - Themes related to problems of using the internet to find out information or answer questions about sex, relationships or sexual health (13-18-year-olds).

Misinformation was young people’s greatest concern as they felt ‘You can’t believe everything you read’ and that there is ‘Lots of inaccurate or fake info’ on the internet. One young person identified that separating factual information from misinformation was challenging, ‘You can’t trust everything you read and you will never really know if what u read is 100% true’. This suggests that YouTube’s new misinformation features identified in the walkthrough ([chapter 5](#)) could be beneficial if rolled out across sexual health content to help young people fact check their information. In addition, this raises

the question of how to help give young people the tools to identify misinformation online, which will be discussed in [section 8.2.2](#).

In addition to misinformation, 13-18-year-old respondents identified bias as a concern. Young people felt that as, *'Not all information on the internet is accurate, and may do more harm than good'*, access to this misinformation could be harmful. One respondent added *'it might set unrealistic standards for people about relationships or sexual health as the things online might not always be true'*, while another felt that individuals online may share *'opinions that are harmful or outdated'*. For this reason, many felt there was a need for *'reliable'* and *'trustworthy'* websites, stating *'You have to be careful to go to a good site. Like Nhs or something'*.

Young people were also cautious of being exposed to explicit content whilst searching for information about sex. They highlighted that their search queries may not be interpreted by a search engine in the way they intended, e.g. *'Sometimes when I ask Google a question it takes me to different sites (such as pornographic)'* or that the links they clicked may not contain the content they intended as *'Some are more graphic than expected'*. Young people were concerned that this exposure may have negative consequences. A comment from one respondent suggested young people *'may find inappropriate stuff if given unrestricted access at a very young age which may cause issues'*, others concurred *'Children are exposed too early and things like porn paints unrealistic expectations'*, and specified they felt porn may lead to *'idealisation of bodies/physique, and so on'*.

A number of other problems were identified by individual survey respondents. One concern was that recommendation algorithms may limit their privacy as *'It could ruin your recommended search's and parents could see what you've been searching and have to talk to you anyway'* which links in to the concerns identified in the literature review in [section 3.5](#) another respondent noted the overwhelming amount of information available to them, highlighting *'There are so many different websites giving different answers which gets confusing'* and another suggested that as content was written by different people *'what they write may not be inclusive or true for everyone'* and thus confusing or not applicable for the person searching.

The 19-24-year-old respondents were also predominantly concerned about the spread of misinformation and the potential of bias in online information, they highlighted many of the same themes as the 13-18-year-old respondents, however they also raised additional concerns about incorrect self-diagnosis, lack of support if exposed to negative information, grooming/exploitation, and other issues (see Table 21 below).

| Themes related to problems of using the internet (19-25-year-olds) | | | |
|--|--|-------------------------------------|---|
| Misinformation* | Biased information | Overwhelming amount of information* | Conflicting information |
| 26 mentions | 5 mentions | 4 mentions | 4 mentions |
| Lack of suitable answers | Possible exposure to explicit content* | Incorrect self diagnosis | No support if exposed to negative information |
| 4 mentions | 3 mentions | 4 mentions | 3 mentions |
| Grooming/exploitation | Clickbait | Not as valuable as face to face | *Theme also mentioned by the other cohort |
| 1 mention | 1 mention | 1 mention | |

Table 21 - Themes related to the problems of using the internet to find out information or answer questions about sex, relationships or sexual health (19-24-year-olds).

In relation to misinformation, one respondent raised an interesting point the spread of misinformation often created an echo chamber effect, *'sometimes what you seen online is an echo chamber of particular views that may not be correct or useful.'* This perspective reiterates the concern in literature around the ways that algorithms may create a confirmation bias of opinions and information where people are only exposed to content similar to what they have already seen (Cinelli et al., 2021; Cohen, 2018; Ofcom, 2020), which as this respondent suggests may not be correct or valuable. Most other respondents gave similar answers to the younger cohort around misinformation, although one user expanded their concerns about the physical and emotional impact of misinformation, stating, *'Inaccurate relationship or sex advice may also lead to accidents in the bedroom or general discomfort and anxiety.'*

Another concern beyond misinformation was that the large amount of information could mean *'there can be a lot of conflicting information or opinions online'*. Young people felt that this conflicting information could cause confusion for those seeking answers, *'Some information cannot be trusted, or they conflict with each other, leaving you confused.'*, as another respondent surmised, *'Differing opinions can make it confusing. Not everyone is an expert.'* This highlights that the large amount of information and

perspectives available were seen by young people as both a positive and a negative, providing options but also potential confusion.

The older cohort of survey respondents specifically highlighted an additional concern unidentified by the 13-18-year-olds; the possibility of incorrect self-diagnosis when using the internet to search information about sex and sexual health. Several respondents were concerned that *'people may diagnose themselves incorrectly instead of seeking help'*. Two respondents provided detailed examples of ways they felt this self-diagnosis may have negative impacts:

'Can overthink things and create stresses that were never there. For example, a female may never have reached an orgasm with the 2 male partners she has been with, she searches her issue and comes across a medical condition and she focuses on that and believes there is something wrong with her. In reality, she's not found some in tune with her body and instead of letting herself express her sexuality she is hiding away from it now because she feels she is the problem'

'It's not always accurate - like every kind of ailment, some things share symptoms with things that are way worse, and I can end up feeling more panicked than when I first went to look. Or on the flip side it might help to downplay symptoms which might be worse than originally thought.'

Another suggested that the social media trope⁸⁴ of using attention-grabbing titles may be misleading and harmful, leading to misinterpretation from audiences, e.g., *'Always exaggerated stories like "my partner said my vulva was HIDEOUS" which may make people think their is too when it was a clickbait title'*. These findings suggest that young people have significant concerns about misinformation, exposure to explicit content and that online content may encourage incorrect self-diagnosis rather than seeking professional help.

7.3.3 Perceived benefits of using YouTube to access sex, relationships and sexual health advice and information

Having expressed their views on the benefits and problems of using the internet to access information about sex, relationships and sexual health, young people were asked their opinions on the benefits and problems of YouTube for this purpose. When it came to identifying the benefits, although the majority of responses from 13-18-year-

⁸⁴ Or convention

olds were positive (see table 22 below), one of the most common answers (n=7 responses) was that there were no benefits to using YouTube for sex and relationships information, and some others (n=4) said they did not know, indicating some did not view YouTube as a positive source for this type of information. Whilst these answers did not account for the majority of responses (n=11 out of n=43 responses), they are important to note.

One respondent felt that this was because this content was poorly created, *'I can't think of any, the vids I saw were very poor and lacked any depth, they were sterile and bland (I suppose because all ages can see them). I don't have an account to see more 'detailed' age appropriate advice'*, whilst others did not extrapolate on why they felt there were no benefits to YouTube. The respondent's observation that they did not have an account returns to the findings from the walkthrough method ([section 5.2](#)) that for content that has been flagged as age restricted users must have an account to view it, meaning that those under 18 or without accounts will be restricted from some content. Whilst it is not possible to know if this participant had viewed the YouTube sex edutainment influencer content this thesis focuses on and found it unsatisfactory, or been viewing other sex education content on YouTube, there is the possibility that their lack of account and age had limited them from accessing content that they felt would have been appropriate or useful. As noted in the walkthrough, this is a significant problem for YouTube sex edutainment's suitability for young people aged 13-18-years-old. The aim of this research is to interrogate the possibilities and problems for YouTube sex edutainment, and this point is a considerable problem that needs consideration before YouTube sex edutainment can be used as an intervention with young people aged 13-18.

However, despite this, respondents did discuss a wide range of benefits of using YouTube for this purpose as can be seen in table 22 below:

| Themes related to benefits of using YouTube (13-18-year-olds) | | | |
|---|-------------------|---|--|
| Lived experience of others* | None | You can see the person | Easily accessible* |
| 7 mentions | 7 mentions | 6 mentions | 5 mentions |
| Helps you understand | Don't know | No awkwardness | Video medium |
| 5 mentions | 4 mentions | 2 mentions | 2 mentions |
| Influencers closer to our age | Can get advice | More in depth | Access to content by professionals / NHS |
| 2 mentions | 2 mentions | 2 mentions | 2 mentions |
| More relatable than parents | break down taboos | Wider audience | No judgement* |
| 1 mention | 1 mention | 1 mention | 1 mention |
| Informative | Useful | *Theme also mentioned by the other cohort | |
| 1 mention | 1 mention | | |

Table 22 - Themes related to benefits of using YouTube to find out information or answer questions about sex, relationships or sexual health (13-18-year-olds).

The other most common theme was that young people (n=7) appreciated YouTube as a source of other people's lived experiences as *'People with experience could be giving advice'* and they appreciated that examples were not necessarily theoretical because, *'it's real people giving the advice/info so real scenarios'*. Some respondents valued seeing those closer to their own age, stating *'You can see people of a similar ages or who have been through similar things' own perspectives'*. Many of these responses revolved around the realness or relatability of the person which is similar to the sentiments expressed about following influencers identified earlier in sections [6.3.2](#) and [7.2](#). One respondent felt that *'They are more relatable than your parents and it gives you a different view because it is only that person opinion'*, and another added *'if you are watching people who are honest and trustworthy, you can find friendly answers for the questions that you are asking that are real in a way that is true to life'*.

13-18-year-olds valued YouTube's accessibility, with some highlighting the speed at which information could be retrieved because *'It's quick to get the advice'*, with others emphasising availability as *'it's available for most people to be able to see!'* One respondent felt that this increased availability, provided opportunity for content from trusted organisations to reach new audiences, *'it means that licensed services such as the NHS and Childline can give their own videos and advice to a wider audience, who*

would not necessarily search for an NHS video for example'. Some also felt that the audio-visual medium was more accessible or easily understood, stating 'A movie is perhaps the best form of conveying such information' or that 'People who know what they are talking about can describe it easier and if one isn't basic enough there is others'. Some respondents also appreciated the ability to see the person talking, they felt that 'youtube is more personal as you can actually see the individual so you feel more understood and less like you're searching for information, it's like you're actually getting advice from someone'.

The 19-24-year-old participants identified similar benefits, such as accessibility and lived experience which were two of their most commonly mentioned themes (see table 23), but also added several other benefits.

| Themes related to benefits of using YouTube (19-24-year-olds) | | | |
|--|---------------------------|------------------------------------|---------------------------|
| More accessible* | Open place for discussion | Lived experience of others* | Visual aids |
| 8 mentions | 6 mentions | 4 mentions | 3 mentions |
| No judgement/embarrassment* | Private | Lots of young people watch Youtube | Free |
| 2 mentions | 2 mentions | 2 mentions | 2 mentions |
| Range of sources | Less formal | Not time-limited | Shared to multiple people |
| 2 mentions | 1 mention | 1 mention | 1 mention |
| Other people watch it too, so you know you aren't alone | break down taboos* | Don't know* | None* |
| 1 mention | 1 mention | 1 mention | 1 mention |
| *Theme also mentioned by the other cohort | | | |

Table 23 - Themes related to the benefits of using YouTube to find out information or answer questions about sex, relationships or sexual health (19-24-year-olds).

In terms of accessibility, participants pointed to a variety of reasons why this may be the case. Some noted that YouTube's prevalence as a social media platform made it ideal for information dissemination as 'Everyone knows what YouTube is' and 'Lots of young people watch you tube so it makes it easily accessible'. They noted that the features of YouTube provided the 'Ability to show videos /diagrams ask questions' and that the social media nature of the platform led to content that was 'Less formal and more chatty' because it is 'Easy to consume content from relatable influencers'.

19-24-year-olds also emphasised the benefits of YouTube as a space that is 'open', the subtext of these comments implied that compared to more traditional RSE learning

spaces YouTube allowed less guarded communication about topics. Two respondents specifically mentioned the opportunity the platform provided to break ‘taboos’ around communication on sex. One suggested, *‘it is a space open for discussions. It is a place where sex can be talked about without it seeming a ‘taboo’ topic and a place where it is normalised’*, and another felt that *‘It reduced the taboo around the subject and creates open, respectful conversations’*. Others felt that the social nature of social media was a benefit because of *‘The open discussion for people from different walks of life and personal experiences to share with each other. E.g comments on YouTube and reddit.’* One respondent also highlighting that knowing that other people watch the videos helped them *‘know im not alone’*.

As with their younger counterparts, 19-24-year-old participants valued the opportunity to consume content about the lived experiences of others. One respondent noted that people *‘Can look for someone who represents them’*, and another felt that this would be validating for individuals who do not find themselves commonly represented in school-based RSE;

‘Having a person who has had similar experiences to you talk through how they overcame those obstacles could be extremely helpful and reassuring to young people. Especially with the lack of sex education taught in schools about LGBT+ relationships, it can feel extremely validating to find those with your sexuality or your gender identity, or even your body type/race/cultural identity talking about their experiences.’

This data suggests that the primary benefits of YouTube are its accessibility, opportunity for sharing lived experiences and open dialogue. Of note is that the older cohort appeared to see greater value in YouTube as a platform for sex and relationships content than their younger counterparts, as some 13-18-year-olds struggled to think of any benefits to this kind of content, demonstrating that they may not immediately view it as a useful information source for this topic, or may be put off by the age-restriction of content. In this way the two age cohorts are possibly viewing quite different types of resources based on if they are able to see content without age restrictions. Therefore, the suitability of YouTube sex edutainment with 13-18-year-olds is called into question by age restrictions, and work may need to be done by researchers, educators and public health organisations to raise the perception of this form of content, suggestions for which are discussed in [chapter 8](#).

7.3.4 Perceived problems of using YouTube to access sex, relationships and sexual health advice and information

When asked to identify the problems with YouTube as a source of sex, relationship and sexual health advice and information, young people identified many of the same issues as they did with the internet in [section 7.3.2](#) as 13-18-year-olds cited misinformation as their biggest concern, followed by exposure to explicit or disturbing content, concern over young children’s exposure to inappropriate materials and distrust of YouTube content creators, amongst others (see table 24 below).

| Themes related to problems of using YouTube (13-18-year-olds) | | | |
|---|---|--|------------------------------------|
| Misinformation* | Exposure to explicit or disturbing content* | Young children exposed to inappropriate information* | None* |
| 13 mentions | 6 mentions | 4 mentions | 4 mentions |
| Don't trust YouTube creators | Could be made by anyone* | Differing opinions/experiences | Poor/irrelevant content |
| 4 mentions | 3 mentions | 3 mentions | 2 mentions |
| YouTube Censoring/ comment sections* | Clickbait or scams | Someone might find out | Overwhelming amount of information |
| 1 mention | 1 mention | 1 mention | 1 mention |
| Don't know | *Theme also mentioned by the other cohort | | |
| 2 mentions | | | |

Table 24 - Themes related to the problems of using YouTube to find out information or answer questions about sex, relationships, or sexual health (13-18-year-olds).

Once again, young people were concerned about ‘false information’, that ‘could be made by anyone’, one respondent felt that ‘there are a lot of people completely unfamiliar with the topic but still publishing’ and another suggested that ‘potentially untrue or harmful information’ created by ‘people who perpetuate untrue or biased stereotypes which might hurt certain groups of people or invalidate others experiences’ was their concern. However, whilst these responses are similar to those expressed about the internet in general, one interesting change is that in relation to YouTube, the 13-18-year-old respondents expressed particular concern about the safety of younger children or teenagers because ‘there’s children who may see things like that at an age too young’, another respondent extrapolated on this:

‘There is always the concern of false information being spread to younger people who don’t have any experience or knowledge of their own. If an honesty isn’t present in what is being said, people who are a lot more impressionable

can be led astray, to believe that certain behaviours are okay when they are abusive for example, or that they are weird and unnatural themselves.'

Therefore, it appears young people are concerned about misinformation, not only for their own sakes but due to YouTube's availability to younger children and their potential exposure to inappropriate content or false and biased information.

Another concern cited was lack of trust in those creating YouTube content, just as some respondents to YouTube sex edutainment content expressed resistance and distrust ([section 6.3.3](#)) and some surveyed young people did not think influencers were trustworthy ([section 7.2](#)). One respondent stated *'Some people on YouTube are idiots. I wouldn't want their advice'*. Meanwhile, another expressed concern over *'The weirdos that are out there that are not trying to help you but doing it for their own sexual gain'*, which may link to some of the distrust in influencers discussed earlier in [section 7.2](#), although these respondents may not necessarily have influencer content in mind as content can be created by anyone on YouTube regardless of their following. Young people had other concerns about exposure to inappropriate content, worrying that YouTube *'Might show something i do not want to see'*, or that *'you could come across disturbing videos'*. One respondent also suggested users needed to be cautious as *'It could be clickbait or other scams'*. In addition to this, a user identified concern about *'YouTube censoring'* and what users might be exposed to in the comment section, however they did not act on these concerns, which would have been valuable as the censorship of sex edutainment content has been discussed throughout the findings of this thesis, but it cannot be assumed that the respondent was referring to this.

As before, 19-24-year olds raised several similar concerns around YouTube as a source of this information, such as misinformation, concerns around younger audiences, (see table 25 below):

| Themes related to problems of using YouTube (19-24-year-olds) | | | |
|---|---|--|---|
| Misinformation* | Opinion not facts | Content being visible in recommendations/ recently viewed | Younger audience less able to recognise misinformation* |
| 17 mentions | 6 mentions | 3 mentions | 3 mentions |
| Hard to know if you can trust | Everyone's experience/body is different | Sources unverified | Exposure to explicit or disturbing content* |
| 3 mentions | 2 mentions | 2 mentions | 2 mentions |
| Self-diagnosis | YouTube censoring content* | Judgement | Could be made by anyone* |
| 2 mentions | 1 mention | 1 mention | 1 mention |
| Not as accessible as other apps | None* | *Theme also mentioned by the other cohort | |
| 1 mention | 2 mentions | | |

Table 25 - Themes related to the problems of using YouTube to find out information or answer questions about sex, relationships or sexual health (19-24-year-olds).

Once again, misinformation was the primary concern of 19-24-year-olds, demonstrating that both age groups appear to have some media literacy and awareness around misinformation. Respondents cited the inability to verify who is trained, fine lines between opinion and fact and 'potential for misinformation' as issues. One respondent expressed:

False information can spread just as quickly (if not faster) than real information. This can be confusing and harmful to some people that will be using this space for a large amount of discovery. Some topics can also be opinion based which can allow people to feel ashamed or that they are diving into a taboo subject. People could easily take a opinion as a fact when it's not.'

Which mirrored the opinions of others that information 'may not be factual, and only reflective of one persons experience'. This was perceived as problematic because 'Sex etc is very personal, so may be different for different people', and 'Not everyone's experience is your experience, let your body and you figure yourselves out instead of forcing yourself into societies standard'. Another concern raised was if information given was biased due to influencers professional interests, one young person queried 'Is it someone I could trust to give me correct information or someone been paid to say it'.

Older respondents also raised concerns about the younger audience YouTube reached. One respondent stated, 'some information could reach a much younger audience - although it's important to be taught about these things growing up, it could raise problems', and another provided the following example, 'Some isn't appropriate

like some is just showing sex toys that even younger people can see'. Meanwhile others were concerned that younger people may not have the ability to discern factual information from biased or false information:

'YouTube content isn't very filtered, and not everyone on there is giving professional and qualified advice. Most people know to filter this information themselves, or take advice from an influencer with a pinch of salt or like you would advice from a friend, however especially for younger people this isn't always the case'.

An interesting finding of this study, however, is that even in the younger cohort of respondents there is a strong awareness of misinformation online although Pérez-Escoda et al., (2021) found that while Spanish young people age 18 – 22 in their study were distrustful of social media for misinformation, they still did not employ tools like fact-checkers and instead remained distrustful of all information received. This may be challenging for those trying to disseminate accurate sexual health information, and whilst suggestions for increased teaching on digital/media literacy are often discussed as a potential solution (Buckingham, 2019), Buckingham highlights that this cannot be seen as an easy fix to a wider systemic problem as when it comes to misinformation and 'fake news' young people *'may be inclined to believe it for quite complex reasons. And we can't stop them believing it just by encouraging them to check the facts or think rationally about the issues'* (2019; p.218)

Returning to the concerns of 19-24-year-olds, the cohort also expressed concerns around YouTube's algorithms. One comment highlighted that YouTube censorship may make accessing content difficult as *'YouTube blocks out a lot of things even if it's educational'*, however the others all focused on worries about previously viewed content about sex, relationships and sexual health impacting their recommendation algorithms. One participant stated, *'I wouldn't want it on my recently viewed YouTube videos in my app!'*, and two expressed concern about *'It coming up in my recommendations'*, providing the example that they worried they may be *'Watching music videos with friends and it coming up "you watched "how to give the perfect blowjob", have you considered "reverse cowgirl, a beginners guide"?''*. These responses highlight that YouTube's algorithmic processes may cause embarrassment, risk or concern for users who are accessing content they wish to keep private. None

of these comments mentioned YouTube's incognito mode, which may mean they are unaware of ways around this process, or do not feel it offers adequate anonymity.

These findings around the problems of YouTube demonstrate that young people are concerned about misinformation and the potential for bias in content that does not come from trusted sources, they worry about content becoming available to those who are too young, and some have concerns around platform features such as algorithms which may impact the privacy of their information gathering.

7.3.5 Young people's thoughts on social media and data privacy

Finally, young people were asked '*Are you concerned about social media platforms having your data and why? Data includes your personal details such as name, email, date of birth, and details about your online activity and what you engage in*' to gather their thoughts on social media data privacy and if this impacted the way they thought about or used social media. The majority of 13-18-year-olds expressed that they were not concerned about social media platforms having their data. Some noted that data was collected everywhere in modern life, as '*That's just how it works now*', and '*everyone has social media*'. One respondent identified that although this was something they considered, they felt it was similar to other areas of life where data was collected:

'I am not overly concerned about this data being stored, as I am a human being who can, like many others, be tracked from existing information such as hospital records. I make this comparison as in the same light, as long as I feel that the information will not be misused it is not something that I feel is a huge concern. All platforms have a risk of data breach, but as do other places that have much more in-depth information about myself and my life. Overall, although it is a point which I consider from time to time, it is not something which I allow to overly concern me.'

Others believed '*in the twenty-first century, it is impossible to disappear*' or stated they had no concerns as '*I agreed to give it to them when I signed up*'. Marwick and Boyd (2014) have argued that in networked publics it is increasingly complicated for young people to negotiate 'networked privacy' due to the varying ways social media dynamics require young people to consider how they take control of their privacy.

Young people demonstrated the ways they negotiated networked privacy around complicated social media environments, some felt reassured because they only shared data they were comfortable with, managed their privacy settings or engaged with disconnective practices such as using fake information about themselves. One 13-year-old stated, *'I make it as difficult as I can for them to identify me ie fake date of birth'*. Another young person felt reassured as although they viewed content on some social media platforms, *'I don't post on social media so the only thing they know are things I would tell people anyway?'* These responses demonstrate the ways that some young people are disconnecting with the intended uses and rules of social media sites and using disconnective practices to maintain their privacy (Light, 2014)

Although fewer 13-18-year-olds were concerned about social media companies having their data, for those that were the most cited reason was caution over how their data is used. One respondent said, *'I think that you have to be careful because you never know what social media platforms will actually do with your personal information'*. These young people were unsure of the intentions of social media platforms and their processes, one respondent stated, *'I'm unsure of who can access that information'* and another noted, *'they say it's confidential but you don't really know whether or not it is'*. Others had significant concerns about how their data was collected and used. A respondent highlighted that they were *'Extremely concerned, 'big tech' are dangerous and the least trustworthy people on the internet'*. Others felt that social media advertising practices had become too pervasive *'I understand that some of the data is necessary, but often it goes too far with targeted advertising, adware etc. Cookies that follow my progress around the internet and aren't limited to the site that they are associated with concern me.'*

In spite of these concerns, some young people felt that the data risks were lesser than the social risks of not participating in the social media landscape, as one comment exemplified, *'it does concern me and what they may use it for, but i also think everything comes with a risk and as a teenager who doesn't live close to friends social media is one of my only options'*. This response highlights the media utility of social media discussed in [section 3.3](#), and that for some young people, the risk of social non-participation is greater than their other concerns, which brings us back to similar themes that were noted the literature in [section 2.1.2](#) around how young people

consider some risks worth taking in the development of their social identities (Denscombe, 2001; Shucksmith, 2004)

Concern about hacking was also noted by a few respondents, one comment stated, *'people can steal your information and use it for themselves'*, and another highlighted a personal worry *'i only have one email that i use for everything so if they hack into my email, they have access to everything'*.

For the older respondents aged 19-24-years-old, the responses were more equally split. Those who had concerns were cautious about their personal privacy, for example respondents stated, *'I also wouldn't want my data shared publicly for my own privacy and safety'*, *'I don't want my date of birth or name shown because they may use it in a bad way.'*, and *'I want to ensure some platforms are private for my own wellbeing and peace of mind. Anyone can find everyone these days.'* Respondents also did not like the possibility of their data being sold. *'I worry that the data collected from me could be used in ways that I would not consent to or that I have unknowingly consented to. I would not want the platform selling my data or giving my data to someone without my knowledge.'*, stated one young person, while another also noted *'There have been privacy issues with social media companies, and they do sell information to third parties. But I also understand that what we post is considered public information by all means.'* Because of this, as with the younger respondents, some took precautions such as trying not to give out personal information or clearing their cookies regularly.

This discussion about posted content being considered public information and if young people are fully aware of this is interesting in the context of this research, which used social media data without commenter consent. This raises questions over young people's awareness that their comments on YouTube videos or in other public social media spaces may be used without their permission or awareness. In my opinion this highlights the importance of not assuming that publicly available social media data is 'fair game' for researchers without taking additional care to protect those whose comments they are. This reiterates my position that taking steps to ensure that all data was anonymised, no usernames or identifying features were included, and quoting only short phrases from public comments was an essential act of respect to protect the anonymity of those whose data has been used.

In addition, some respondents had concerns about the role of targeted advertisements. One respondent stated, *'personal data inform advertisements and features shown which have an impact on society we still don't fully understand'*, and another provided the example *'if someone is struggling financially, they may have viewed vast amounts of selling pages on social media, if they choose to make a change then they could still be seeing advertisements that could hinder their choices or decisions.'* These comments demonstrate that some young people were aware that the use of user data by algorithms and targeted advertising may have unforeseen social impacts that Beer (2009) refers to as *'the social power of algorithms'* (p.1) that feeds back into the lives of human in ways they may not realise.

However, many respondents were not concerned about the collection of their data. One respondent stated *'I'm not worried as I do not engage in anything that would warrant concern'*, while others trusted the platforms they used, felt reassured by reading the terms and conditions or felt that the collection of their data made their user experience more convenient. For some there was an acceptance that complete data privacy seemed unachievable, with one participant noting, *'I feel like my data is kind of everywhere. Like it's already out there so I'm not worried'* and another admitting *'I'd rather have privacy but in the world we live in that doesn't exist, so I just put it to the back of my mind.'*

This data suggests that young people are split in their feelings about data privacy on social media. Many respondents did not have concerns or accepted the role data mining takes in modern life within western society, but for those young people who did have concerns about the how social media platforms used their data, their responses provide concerns that need to be considered.

7.4 Conclusion

This chapter has identified the key findings from the third phase of this research, taken from a survey with 13-24-year-old young people. The chapter began by identifying data around young people's seeking and sharing practices, namely their connectivity and devices, experiences of RSE and how they seek and share information about sex, relationships and sexual health. Following on from this the chapter explored the response young people have to influencers and their content. Before finally laying

down the data gathered on what young people perceive to be the benefits and problems of using the internet and YouTube for independent sexual health learning, and their thoughts on social media and data privacy.

The key findings in this chapter are:

- Young people in both cohorts were highly digitally active with internet, device and YouTube use all highly common. This made YouTube a suitable and accessible platform for the majority of young people who felt YouTube and the internet were accessible, led to less embarrassment and judgement, and provided different forms of knowledge about sexual health such as the lived experience of others. Many had already used the internet to gather information about sex, relationships, and sexual health.
- Most young people surveyed would share information from relevant sex and relationships information videos with a friend if they felt it would be helpful to them, for some this involved the sharing of links, however others preferred to talk about content themselves. Respondents displayed an astute awareness of assessing content's suitability and being considerate in how this sharing occurred before passing content or information on to their peers.
- Many of the young people engaged with influencers, however there were mixed opinions on influencer trustworthiness. Young people were cautious of advertising and what it signalled about an influencer's motives.
- Young people were largely concerned about misinformation online when looking for relationships, sex, and sexual health information on both YouTube and the wider internet, and many identified the importance of trusted and reliable sources, such as the NHS.

With the findings from this chapter, the final stage of mapping the data web actor-connections can be completed, and we can see impacting elements, both human and non-human that weigh on young people's use of YouTube sex edutainment in figure 27 below.

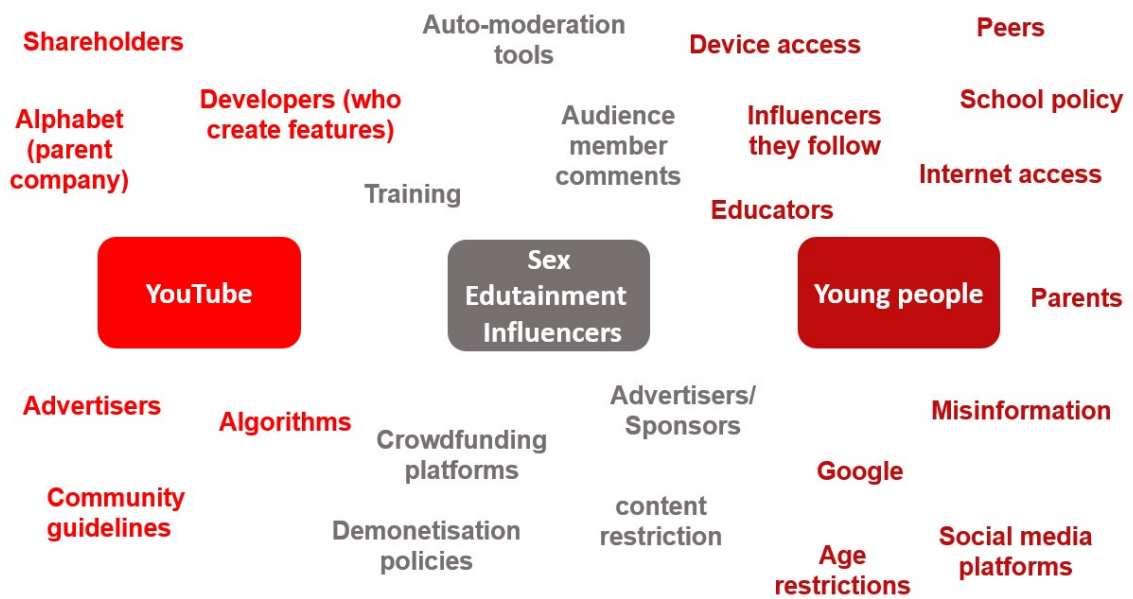


Figure 27 – ANT data web stage 3

The next chapter will combine this data web with the literature web developed earlier in this thesis (figure 7) to demonstrate a comprehensive mapping of networks between actors around the assemblage of YouTube sex edutainment. In addition, the discussion will consider how the perspectives from the three core actors, YouTube, influencers, and young people, collide around YouTube sex edutainment, and how observing the assemblage of these perspectives might provide us with solutions to some of the challenges identified with YouTube sex edutainment content.

Chapter 8 - Discussion

8.0 Introduction

This research has sought to understand the possibilities and problems of YouTube sex edutainment through the tracing of connections in the assemblage of YouTube, sex edutainment influencers and young people. This has been achieved through a three-phase digital mixed methods study rooted in Actor-Network Theory. Throughout this thesis elements influencing the three key actors in both the literature and the data have been mapped. By combining these together, we can see a detailed picture of the elements that impact the assemblage of YouTube sex edutainment in figure 28.

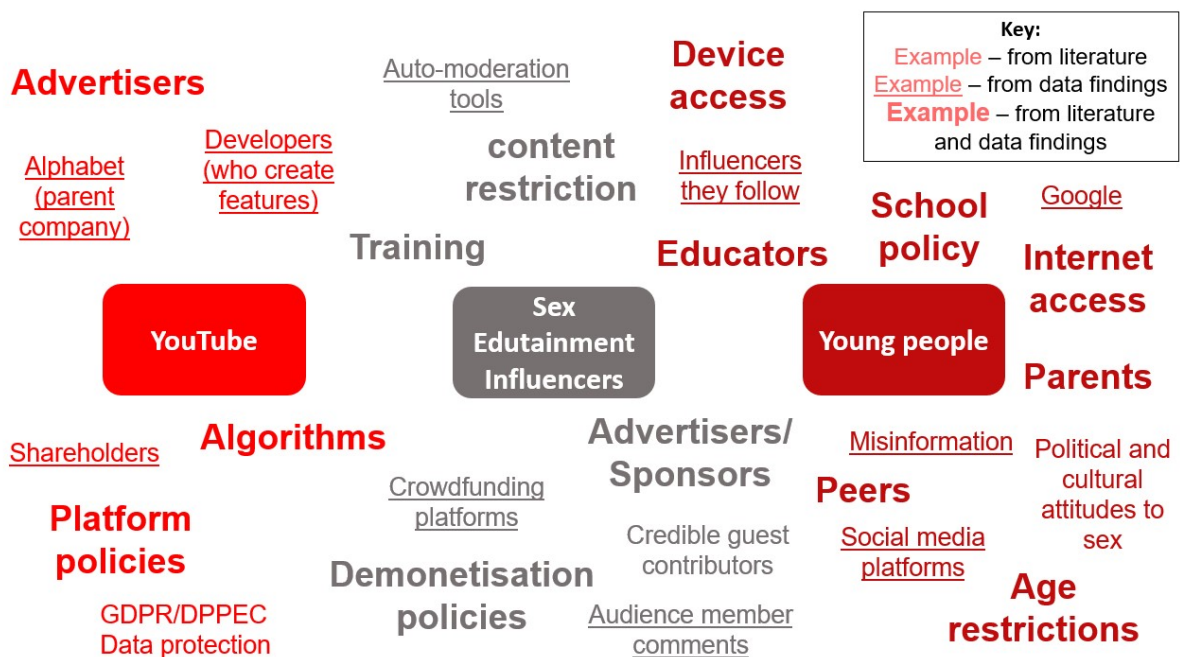


Figure 28 – ANT literature and data web

We cannot fully know the possibilities and problems of YouTube sex edutainment without first understanding the many elements that impact the assemblage. Whilst this thesis has focused on YouTube sex edutainment from the perspective of the three central actors, Law (2016) states that ‘an actor is always a network of elements that it does not fully recognize or know’ (p.147). YouTube sex edutainment does not operate in a vacuum and each actor is influenced by additional peripheral elements that impact their position within the assemblage. These elements contribute to the possibilities and problems of YouTube sex edutainment.

The aim of this research was ‘to interrogate the possibilities and problems of YouTube sex edutainment content through the assemblage of YouTube, influencers and British young people aged 13-24-years-old’. Returning to figure 4 from chapter 1 (below) we can see this aim and the 6 research objectives utilised to achieve it that have guided this research.

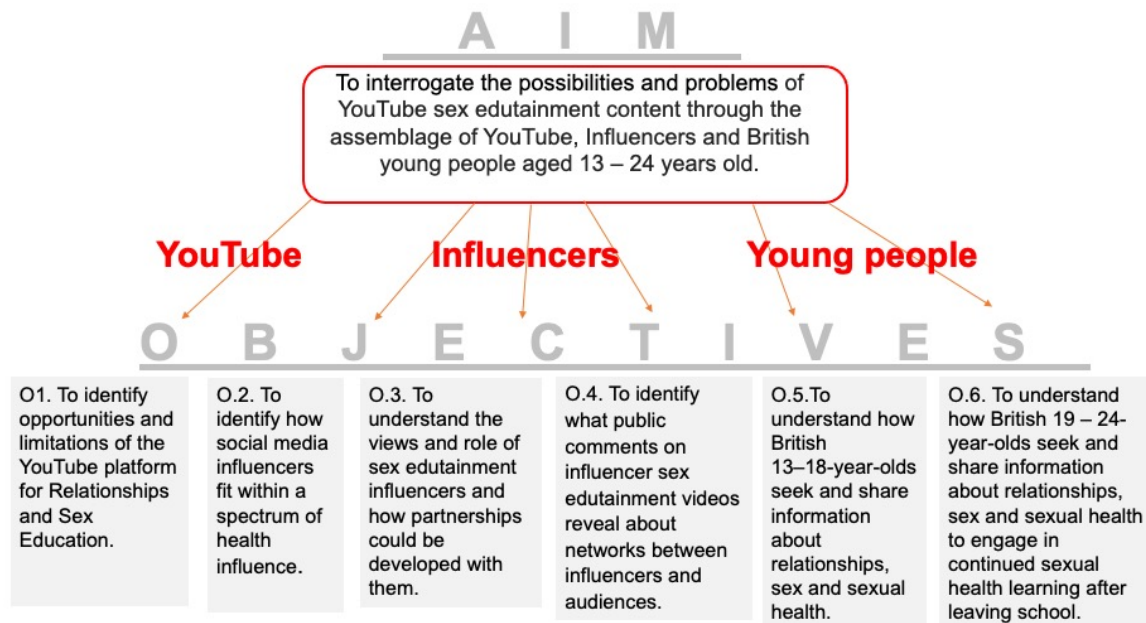


Figure 4- Research aim and objectives

These aims and objectives, and the use of Actor-Network Theory to fulfil them have laid the foundation of interrogating the possibilities and problems YouTube sex edutainment and this chapter will discuss how the combination of data from answering these objectives combines to answer the research aim. Having completed the three phases of data collection and analysis, based on each of the three key actors, the complete findings were combed for themes, benefits, issues, and debates that had been raised from the perspectives of all three actors. Viewing the possibilities and problems that emerged through the lens of all three actors can aid in finding solutions and open further affordances for YouTube sex edutainment as a learning source, which will be discussed in this chapter using examples from the findings of this study, alongside literature identified from chapters 2 and 3.

Having discussed the possibilities and problems of YouTube sex edutainment, the chapter will then discuss what this might mean for YouTube and its suitability for

disseminating sex edutainment content in [section 8.3](#), before identifying implications for the key actors and potential further impacts of this work. Following this, the challenges and limitations of this research will be discussed, and the chapter will draw to a close by reiterating the unique contribution this thesis has made to knowledge.

8.1 Possibilities of YouTube sex edutainment

Interrogating the findings from this research has identified three key possibilities in YouTube sex edutainment. This section will discuss these possibilities, starting with how YouTube sex edutainment is already being used by audiences, before exploring the opportunities for sharing processes and peer education, and detailing the many ways that the actors in this study identify accessibility as a key feature of YouTube sex edutainment.

8.1.1 Current use of YouTube sex edutainment

A key finding of this research is that this content does not just have the possibility for use as a form of independent sexual health learning, but it is already being utilised this way. Although we cannot tell how much of the data from the comment analysis of existing YouTube sex edutainment content came from 13 – 24-years-olds or individuals based in the UK, this data has given a clear indication that many users were finding benefits from engaging with this independent sexual learning content.

The findings discussed in section 6.3.1 highlight that there is a clear educational potential to this content, with commenters regularly thanking the sex edutainment influencers because they had found the videos helpful in their own lives, and some using the information from the videos to help expand their knowledge and understanding of others. Many video commenters felt that the sex edutainment content had helped them fill in the gaps where their sex education had been unsatisfactory, particularly around topics such as LGBTQ+ information.

Therefore, whilst the other possibilities and problems discussed in this chapter highlight additional potentials for expansion of the use of this content and barriers to that, it is important to note this content is already serving a purpose and being used by

individuals as part of the way they engage with sexual health through independent learning.

8.1.2 Sharing processes and peer education

The key finding from this research on the affordances of YouTube for sexual learning is the potential for it to stimulate sharing practices and peer education. By achieving research objectives 5 and 6 to understand how British 13-24-year-olds seek and share information about sex, relationships and sexual health I have identified young people as highly digitally literate internet users who most commonly turn to internet sources and peers for answers to their questions about sex and relationship topics. This suggests that peers are a trusted source of support and knowledge to young people when it comes to relationships and sex, which confirms their role in the health influencer framework as interpersonal influencers, and that young people also seek information from a variety of internet sources.

In chapter 2, it was theorised that YouTube sex edutainment might be suitable for peer learning with digitally active 13-24-year-olds, combining digital approaches with peer education potential (section 2.3). One criticism around peer education programmes has been their implementation in a social vacuum (Price & Knibbs, 2009) that relies on an artificially reconstructed social process (Milburn, 1995). Yet the findings of this study identify that most young people were already engaging in networked publics (Boyd, 2008, 2010) through social media, and this research sought to understand if these existing social processes could be utilised for peer education using YouTube sex edutainment content.

The results show that although utilising online content may not be their primary response when supporting peers with sex and relationship problems, the overwhelming majority of both cohorts stated if they came across a YouTube video relevant to a relationship problem their friend was having, they would share the video with their friend or watch the video to inform themselves then pass on the information verbally. Young people demonstrated a mature understanding of sensitivities around the sharing of such content, often emphasising that they would only share content if they had checked its suitability first. This demonstrates that young people would use YouTube sex edutainment content as part of their media circuits (Rouse, 1991; Lange,

2007) however they are cautious of the content they introduce to these circuits and interrogate its suitability and the most appropriate way to share the information based on their intimate knowledge of their networks, which aligns with the findings of Byron, Albury & Evers (2013) and Byron (2015).

As peer education is an approach to health promotion based on the sharing and teaching of health information between peers, the data in this study supports the possibility that existing social connections could be utilised by young people. This was supported by the comment analysis of the public response to YouTube influencer sex edutainment content (objective 4) where, in many videos, commenters discussed using the video to support or understand their friends better. Some shared videos directly with friends via online networks, while others took notes to pass on information or discussed showing a video in person. Whilst the ages of commenters on the videos cannot be known, it demonstrates that these content sharing processes between peers are already taking place organically for some users consuming this content. This sharing-potential, or 'spreadability' of content (McKee et al., 2018) is enabled by YouTube's sharing features on the platform, as evidenced in the Walkthrough findings in [section 5.3.](#) and in young people's survey responses that they would share content using a variety of interconnected private messaging options to share content such as WhatsApp, Facebook Messenger, or sharing a direct link.

However, the sharing of sex and relationships content between peers is not the only peer education possibility this research has uncovered. The findings suggest that YouTube sex edutainment influencers themselves could possibly be utilised as an alternative form of peer educator or health influencer. Social media influencers were followed by the majority of young people surveyed in phase 3 of the study, and 75.5% of 13-18-year-olds and 62.9% of 19-24-year-olds watched videos made by YouTube influencers. The data identified that for those influencers who were perceived as approachable and authentic (Tolson, 2010; Cunningham & Craig, 2017), parasocial trust relationships appeared to have been built as the majority of surveyed young people following influencers trusted at least some of the influencers they followed. Some young people do look up to influencers, and YouTube sex edutainment influencers, as discussed in [section 6.3.2.](#) where YouTube sex edutainment influencers were seen as role models by some audience members, and markers of

parasocial relationships could be seen in the way young people addressed comments to the influencers, with commenters suggesting that they wish they had a friend, big brother or big sister like the influencer, or opening up about their personal situations to the influencer. Meanwhile several survey respondents noted they followed influencers for life advice, because they had things in common with them or felt the influencer was someone they aspired to be. In addition, influencers who responded to the email interviews noted they receive direct messages and comments from audiences seeking advice, suggesting that their audiences trust them to provide guidance around sex and relationships. These findings support existing literature that has suggested audiences build parasocial relationships with social media influencers (Yuan & Lou, 2020; Sokolova & Kefi, 2020) and the new health influencer framework provides a way of interpreting how social media influencers may compliment and expand existing forms of health influence and provides researchers in this field a starting point for understanding social media influencers within health.

Therefore, if young people building parasocial relationships with influencers they trust, it is arguable that this parasocial interaction could be used as the basis for building digital peer education relationships. Returning to Maticka-Tyndale and Penwell Barnett (2010)'s description of peer education that was discussed in [section 2.3.1.](#), we can see that the same concept can be applied to the social media sharing processes around YouTube sex edutainment:

“The approach is based on the assumption that, especially among adolescents, peers learn from each other, are important influences on each other, and that norms and behaviors are most likely to change when liked and trusted group members take the lead in change” (p.98).

This research has demonstrated that young people are important influences on each other as they use peers as a source of information and support around relationships, sex and sexual health and are willing to engage with information sharing around this topic. In addition, the research has suggested and found initial evidence that social media influencers may be considered trusted group members when audiences build parasocial relationships with them. Considering these findings, YouTube has potential to tap into existing social processes to act as a peer education source as young people share content and the information found within it between one another and are influenced by digitally mediated influencers who can act as alternative peer educators.

Furthermore, given the logistical difficulties of implementing traditional peer education programmes in schools, such as the excess time and resources required to train and replace peer educators (Rees, Mellanby & Tripp, 1998), this could also support YouTube sex edutainment content providing the possibility to modernise peer education as an engaging digital intervention that does not require regular training of new peer educators but can be uploaded once and shared to and between young people, which could also save money and reach a wider number of people. Further research is needed into testing influencer-based peer education interventions in a sexual health context to expand on this initial finding. This opportunity to use influencers and social media for peer education purposes may also have valuable repercussions beyond sexual education into other areas of health messaging, which will be discussed in sections [8.3](#) and [8.8](#).

8.1.3 Accessibility

In addition to identifying sharing processes and peer education as a possible benefit to YouTube sex edutainment, the findings also revealed that the assemblage offered a variety of benefits for accessibility of information dissemination. The word accessibility is used here to mean easy to use, reach, and understand, or the quality of being obtainable, rather than in the sense of being accessible to those with additional needs, impairments, or a disability.

For YouTube sex edutainment to be suitable as a potential learning ecology (Duffy, 2008; Brown, 2002) for independent learning young people need to be able to access the platform and find benefit in video content. Young people responding to the phase three online survey noted YouTube was free to use and allowed users to access information quickly. The YouTube walkthrough used to achieve research objective 1 found that in addition to being free to access, YouTube can be accessed on any internet-enabled device, and as all young people surveyed had access to the internet this meant it was accessible to them. The app is familiar to young people, with survey respondents noting '*everyone knows what YouTube is*', the majority of respondents were already using YouTube, and findings from literature suggest YouTube is a highly popular source of health information for young people, especially for prevention and wellbeing (Rich et al., 2020).

Surveyed young people also felt that YouTube made content accessible to audiences who may not necessarily use traditional health sources, such as NHS content, and highlighted that the audio-visual medium was easier to understand, often described information in understandable terms that were '*less formal, more chatty*', and could use illustrations and diagrams to be more engaging. This compliments suggestions from Brame (2016) that YouTube was a valuable learning resource to students because of the conversational tone and use of key words and illustrations on the screen to minimise extraneous cognitive load during the learning process. Young people also valued being able to access a variety of different opinions and lived experiences on the platform compared to what they encountered in the classroom, making different types of knowledge accessible to them, such as lived experience and peer support. As discussed in [section 2.3.3](#), there is a growing body of work into the ways social media can be used in peer-to-peer support and the sharing of lived experiences around health conditions (Attai et al., 2015; Vasilica, 2015; Vasilica, Brettle & Ormandy, 2020; Vasilica & Ormandy, 2017; Dhar et al., 2018; Grosberg et al., 2016; Masanet & Buckingham, 2015) therefore, this research suggests that YouTube could provide similar benefits, as peer-to-peer support was also observed in the comment analysis of YouTube sex edutainment content.

Not only does YouTube sex edutainment make different types of knowledge available, the analysis of YouTube comments for response to sex edutainment influencers and their content (objective 4) also identified that some users felt it filled gaps in provision their school RSE was not filling, particularly around subjects such as LGBTQ+ sex and relationships, suggesting it was making this content more accessible to those who needed it. Although the geographical location of commenters could not be guaranteed, comments were present on videos of British sex edutainment influencers and those in other countries, therefore it is arguable that this is applicable to the British context of this study. This is important given that the literature explored in section 2.1.5 highlighted that there are gaps in provision in areas such as LGBTQ+ RSE (Pingel et al., 2013; Abbott, Ellis & Abbott, 2015; Shannon, 2016; Terrance Higgins Trust, 2016; Hobaica & Kwon, 2017, Hobaica, Schofield & Kwon, 2019) and pleasure (Lenskyj, 1990; Allen, 2006; Fine & McLelland, 2006; Ringrose, 2013; MacKenzie, Hedge & Enslin, 2017), and these unmet information needs were disclosed by young people when asked about how their RSE experiences could have been improved ([section](#)

[7.1.2](#)). Therefore, YouTube sex edutainment may provide an opportunity to make content on these topics accessible outside of a classroom setting to fill gaps in provision, in a way that provides privacy for information seeking, and gives young people access to information as and when they require it. Young people may not feel their school RSE is relevant to them if they are not in a sexual relationship at the time of their lessons, however their information needs may change as they come into sexual relationships, whether this is during their time in education or after they have left. The ability to access YouTube at any time as information needs change is therefore an additional benefit to YouTube's accessibility.

However, despite surveyed young people suggesting many accessibility benefits to YouTube for independent sexual health learning and the possibilities it appears to offer to fill gaps in RSE provision, many young people surveyed were not regularly utilising this content to seek information about sex, relationships and sexual health, instead predominantly using Google or the NHS website according to their responses. This may be due to the censorship of content for under 18s (see [section 8.2.3](#)), concerns about misinformation (see [section 8.2.2](#)), being uncertain over the validity of sources, or lack of awareness of the existence of these resources. Therefore, future work should collaborate with young people to identify the best ways to raise the awareness and confidence in well informed YouTube sex edutainment content.

Beyond this, although the findings of this study indicate accessibility as a benefit to YouTube, there is also conflicting data as some significant barriers to access were identified. YouTube requires an internet connection and internet-ready device, therefore young people experiencing internet poverty may not be able to access YouTube, especially if their school also enacts blockers to avoid students accessing social media sites including YouTube on their school internet network.⁸⁵ The walkthrough observed that the app requires users to create an account using a Google account, which adds another condition to platform accessibility. In addition, the walkthrough discovered that, whilst anyone aged 13 and over is able to create a YouTube account, sex and relationships content can be flagged and restricted from

⁸⁵ An additional topic around school internet governance policies, that has not been explored in this research, is if young people only have access to the internet at school, even if YouTube is not limited by their school network, specific words related to RSE could, in theory, trigger system blockers, limiting accessibility. This is not an area that has been given focus in this research but may offer an interesting question for further research into YouTube sex edutainment.

under 18s. Although this is a way of protecting minors from being exposed to explicit content, the walkthrough found that in some cases this flagged educational YouTube sex edutainment content that should not have contravened the community guidelines, as such this is a significant problem for accessibility for 13-18-year-olds (discussed further in [section 8.2.3](#)). Despite this, only one young person surveyed discussed content restriction as a concern about YouTube. This may be because some young people are unaware of the content they are unable to see, or because some young people noted using a fake date of birth on social media platforms it is possible that some may be using accounts with an adult date of birth as no verification of age is required when signing up. It is not possible to know for certain as 13-18-year-olds were not asked directly if they were engaging in these disconnection practices that use YouTube in ways unintended by the platform (Light, 2014).

It was interesting to note however, that some unexpected findings from analysis of the public comments on influencer YouTube sex edutainment content found that this content was not only accessible to young people, but also parents, teachers, and healthcare professionals who used it to widen their own thinking or shared it to disseminate knowledge. These findings highlight that some parents were using these resources to support their children, tying in with previous research that noted the value of including parents in sex education (Walker, 2001; Walker, 2004; Yu, 2010; Sheppard, 2020, Alldred, Fox & Kulpa, 2016). Although this research has predominantly looked at YouTube sex edutainment as a form of independent learning, in considering the possibilities it is valuable to acknowledge that this media could have a broader reach to be used as learning resources by parents, in schools or healthcare education. Lameiras-Fernandez et al., (2021) recommends blended learning approaches between new technologies and traditional teaching, *'blended learning programs are perhaps even more promising, given their combination of the best of face-to-face and digital interventions, meaning they provide an excellent educative tool in the new context of the COVID-19 pandemic, and may even become the dominant teaching model in the future.'*(p.14), therefore an additional possibility of YouTube sex edutainment may be its suitability for emerging blended learning approaches.

Further research is warranted to investigate if additional assemblages can be created between schools, parents, young people, and YouTube sex edutainment content to bridge gaps. However, from the findings of the research we can acknowledge that beyond the benefits for independent sexual health learning there could be further possibilities for this content to cross over into additional contexts. One practical example of how the findings of this research might be applied is considering possibilities for signposting young people to valuable YouTube sex edutainment content that has been fact checked and approved through schools, perhaps via lists of content that may be useful in specific contexts as extra learning outside the classroom. For example, in a lesson on contraceptives, a handout could be provided with links to vetted YouTube videos on additional topics such as contraceptives for female same sex couples, how to communicate to a partner that you want to use protection, and what types of lubricants can be used safely with condoms. This may aid in directing young people to suitable further learning without requiring additional classroom time. However, we need to recognise that schools may not know where to begin or feel confident creating a handout resource like this. Instead, there is an opportunity for future research to be conducted with a public health organisation or charity (e.g. Brook advisory or the Sex Education Forum) or to co-create, ideally with the input from young people, a list of recommended existing videos that have been fact checked and are relevant to specific topics. More research is required on this matter though as it may undo some of the other benefits of YouTube as an independent sexual health learning source such as the privacy and autonomy that young people may want, and as such involving young people in further research is recommended.

8.2 Problems of YouTube sex edutainment

Whilst this research has identified valuable possibilities for YouTube sex edutainment as a form of independent sexual learning, it has also raised concerns that are currently limiting the platforms potential. This section discusses three themes around which the main potential problems with YouTube as a source of sex and relationships information centred. It is my opinion that although there are problem areas around YouTube sex edutainment these are not reasons for dismissal of this media but can be used to target improvements for developing future interventions, (see [section 8.3](#)). This section describes three core themes where problems and concerns were identified throughout

the data, and how the assemblage of perspectives from YouTube, Sex edutainment influencers and young people may converge to provide future development of these resources for public health and education purposes. The section starts by interrogating how advertising and funding around YouTube sex edutainment can cause frictions between actors in the assemblage, before discussing concerns about misinformation, and finally the ways that governance cause limitations for this form of sexual learning content.

8.2.1 Funding and Advertising

One theme that arose across all three phases of the research from the perspective of each actor was the issue of funding and advertising, where conflicting perspectives caused tension in the YouTube sex edutainment assemblage. However, by viewing this topic through the lens of Actor-Network Theory, from the viewpoint of each actor, I will discuss suggestions on easing these tensions.

YouTube encourage the creation of family-friendly content that advertisers want to sponsor and have their names appear alongside, which was evidenced during the walkthrough. As part of appeasing advertisers YouTube also demonetise content that may be seen as inappropriate, as advertising is their biggest source of revenue, and as Beer (2017) has emphasised YouTube are first and foremost a for-profit business trying to navigate tensions in their service between their branded image of community and the profit-driven nature of the company (Gillespie, 2010). Meanwhile, the influencers responding to the email interviews in phase two identified that their sex education content often gets flagged as inappropriate, despite the walkthrough noting that educational content does not go against YouTube's policies, this means their content is often demonetised.

Without monetisation through YouTube, influencers are left to find sponsorship or funding themselves if they want to fund the time taken to create content. As Cunningham and Craig (2017) have suggested, funding often comes in the form of advertising partnership with businesses (.e.g., condom manufacturers), using crowdfunding such as Patreon where followers pay a small monthly payment to access additional content and support the influencer, or the selling of merchandise (Johnston,

2017). However young people in phase three identified that advertising affected their trust of influencers. Too much advertising or choosing to promote products unaligned with their values was seen as untrustworthy, with young people questioning if advertisers created bias in the validity of information shared. Resistance ([section 6.3.3](#)) or distrust against influencers ([section 7.2](#)) often related to advertising and assumptions that influencers were greedy or unethical in seeking money. This creates a dilemma for YouTube sex edutainment, as creating high-quality sex edutainment content is labour-intensive, and influencers are entitled to seek remuneration for their work in order to continue creating and maintaining their relationship with their audiences. It cannot be expected that Sex edutainment influencers will create videos as a purely charitable endeavour, therefore new solutions need to be found if YouTube sex edutainment is to succeed.

One potential solution to this dilemma is for health organisations and charities to partner with YouTube sex edutainment influencers. Influencers responding to email interviews in phase two stated that funding was the main way public health organisations could support them in making their content. This funds the creation of content, removes the need for influencers to enter into agreements with businesses to promote goods and services, and may also provide an additional level of credibility to the content (as is discussed further in [section 8.2.2](#)), and the systematic review conducted for this research identified that influencer health content campaigns that partnered with health or research organisations had positive outcomes (Cheng et al., 2020; Bonnevie et al., 2020; Guo et al., 2020).

In addition, as YouTube develop their new health partnerships department, they should give special consideration to YouTube sex edutainment, to review and develop more sophisticated understandings of what is and is not 'sexual content' in their community guidelines. Doing so could develop opportunities for monetisation to take place on YouTube sex edutainment videos and enable YouTube to grow as a sexual health learning ecology, aiding them in their aim to make YouTube a platform where health information is exchanged alongside the other many other forms of user-generated and professional content available.

8.2.2. Misinformation

Given that misinformation about health on YouTube has raised concerns (Pant et al., 2012; Syed-Abdul et al., 2013; Gabarron et al., 2013; Goobie et al., 2019; Loeb et al., 2019; Fode et al., 2020) particularly due to COVID-19 misinformation (Li et al., 2020; Knuutila et al., 2020; Brennen et al., 2020; Marchal & Au, 2020), it is unsurprising that misinformation was a source of apprehension to young people about internet and YouTube sex edutainment. Young people noted that false information could be made by anyone on YouTube, and raised a number of concerns about this, such as misinformation leading to incorrect self-diagnosis. Misinformation is also clearly a concern to YouTube as the walkthrough noted dedicated community guidelines sections to both misinformation and COVID-19 medical misinformation. This interest in dispelling misinformation also led to YouTube creating the health partnerships team to increase high quality and easy-to-understand medical information on the platform, demonstrating that YouTube have concerns about misinformation on their own platform and what it might do to their credibility as an information source. Finally, the influencer email interviews noted that the three influencers had each engaged in some sexual health related training, however their training was varied and largely tied to previous professional roles and not all mentioned if their training was accredited. Despite this training, the comment analysis found several commenters correcting one of these influencers for confusing bacterial and viral sexually transmitted infections therefore even trained influencers may share content with factual inaccuracies.

Concerns about misinformation have the potential to limit young people's trust in the reliability of the information they find in YouTube sex edutainment. Whilst young people's concern towards the validity of claims made in online health content, and their interest in finding reliable sources, is a positive attribute, it may limit the potential of YouTube sex edutainment interventions, and factual inaccuracy and misinformation are considerable concerns for any health promotion resource. However, the systematic review ([Section 3.7](#)), noted where influencers partnered with health or research organisations their content could be approved by the organisation, avoiding misinformation and leading to positive campaign outcomes (Cheng et al., 2020; Bonnevie et al., 2020; Guo et al., 2020). Although there is no literature on using this process for sexual health the findings may translate well to a sexual health context.

Therefore, public health organisations partnering with YouTube influencers to sponsor content or have Sex edutainment influencers create content for their own social media pages and websites may also provide credibility that reassures young people and stops potential misinformation by giving the public health organisation the opportunity to fact-check information being shared.

Finally, there may be opportunities to provide affordable training to influencers to create an activated team of health influencers with the tools and training to provide accurate health information accredited by organisations that young people can trust. At present the sexual health charity Brook provide free RSE training modules⁸⁶, therefore whether an expanded additional e-learning unit for online content creators to compliment these or an alternative accredited training course by another provider, there are opportunities for expansion of training. In addition, YouTube sex edutainment influencers may wish to try and build credibility with their audience by publishing the sources for their information and any training they have in the descriptions of videos to aid young people in identifying if the information they are viewing is credible. Finally, YouTube may wish to expand their current AI tagging system that was identified during the walkthrough and automates links to reliable health sources when it locates videos linked to COVID-19 and HIV to utilise the viewing of sex edutainment content as an opportunity to send viewers on to reliable sources of information to help them fact check and further research the topics they have explored on YouTube.

8.2.3 Governance

The final key theme that was identified as a limitation to YouTube sex edutainment was governance. This study identified governance being used in positive ways, such as protecting the community from harm ([section 5.2](#)) or flagging situations that were dangerous to younger users ([section 6.3.4](#)). However, YouTube is a business, and any social media health intervention has to recognise that utilising a platform designed to make money will involve manoeuvring around some problematic aspects this causes. One concern raised by surveyed young people was how social media companies use

⁸⁶ Available at <https://learn.brook.org.uk/>

their data and although the majority of respondents accepted that '*That's just how it works now*', others were concerned about data privacy.

Another area of platform governance that could cause significant challenges for YouTube sex edutainment is age limitations, although the walkthrough noted that anyone over the age of 13 can create a YouTube account, it also found sex edutainment content being restricted from under 18s, either automatically flagged by algorithms or reported by individuals. This may limit the access 13-18-year-olds have to YouTube sex edutainment content significantly, as noted in the restriction of all 22 videos used for comment analysis, although in the comment analysis some users discussed using disconnection practices (Light, 2014) such as using a fake date of birth to access restricted content.

Any future interventions using YouTube need to take into consideration how to utilise the app in a way that does not limit the suitability of content. It might be that this could be achieved through researchers partnering with YouTube's health partnerships team to develop their role in the YouTube sex edutainment assemblage and ensure that content is approved by the platform without restrictions. YouTube are a key actor in the YouTube sex edutainment assemblage and co-creative research with YouTube may be more beneficial than individual Sex edutainment influencers trying to remove restrictions from their videos. If this limitation cannot be overcome, then it may make YouTube sex edutainment unsuitable as a vehicle for larger-scale interventions for under 18s and may instead be sufficient only for use with young people aged 18+ as part of their continued sexual health learning.

To conclude, it was ventured in section 2.3 that YouTube sex edutainment content may have the potential to avoid the limitations placed upon school-based peer education programmes (Forrest, 2004) by no longer limiting certain topics, such as pleasure. However, the research findings and discussion in this section have demonstrated that there are still limitations if we are simply exchanging one type of governance for another by switching from school governance to the governance of YouTube, as the following section will explore in detail by interrogating what this research means for YouTube's suitability for sexual health information dissemination.

8.3 So, why YouTube?

Having discussed the possibilities and problems of YouTube sex edutainment, an inevitable question needs to be raised. Given the problems identified in this research is YouTube still an option for independent sexual learning, and if so, why YouTube and not an alternative? As it stands, this research has identified that despite the positive potential for this medium there are significant problems that need to be overcome around YouTube sex edutainment if it is to be a suitable intervention to address the gaps in provision for British young people aged 13 – 24.

In [section 3.2](#) I questioned if YouTube sex edutainment might offer a democratic form of learning where young people are not limited by the governance of schools and their governing bodies. However, having conducted an in-depth interrogation of the possibilities and problems of YouTube sex edutainment through the tracing of connections surrounding it, the findings of this research show that Turner (2004) was right in warning against viewing Web 2.0 technologies through the rose-tinted glasses of democratisation. Whilst the walkthrough findings highlight that YouTube position themselves as a platform from which to speak (Gillespie, 2010) by emphasising the language of democracy that *'everyone deserves to have a voice'* (YouTube, 2020), the findings of this research have highlighted those voices will not reach all ears, largely due to a combination of YouTube platform policies and algorithms. Whilst the walkthrough of YouTube identified that YouTube sex edutainment does not in theory invalidate YouTube's community guidelines, it is regularly age restricted and demonetised either by the platform algorithms or user flagging processes, meaning that 13-18-year-olds are unable to view content. Therefore, as Beer (2009) identified, although platforms like YouTube employ a rhetoric of empowerment and democratisation, hidden power structures are still enacted on users from within the framework of the software they use.

Although YouTube's intention in their policy and algorithmic structures may be with the intention of protecting their community from inappropriate content, algorithms can enforce oppressive power structures (Noble, 2018; Gillespie, 2014). As discussed in [section 3.5](#), algorithms do not operate in a social vacuum, they learn from the human patterns they observe and the 'training' they receive from platform governance, and in doing so can reveal uncomfortable truths about wider perceptions in our society. The

literature review in Chapter 2 began by discussing dominant narratives and histories in RSE and how these have been affected by moral panics and a fear for the preservation of innocence of children that sought to protect them from sex. I argued that these narratives and histories had created gaps in British RSE provision, but that YouTube sex edutainment might provide an alternative solution to these issues. Having traced the connections around YouTube sex edutainment to interrogate the possibilities and problems of this using ANT, this study has demonstrated the biggest challenge for using YouTube for independent sexual health learning is that these same discourses around sex, and protectionist narratives also permeate our digital environments. The same social attitudes to sex and protecting children can be seen in the policies of YouTube and how their algorithms enact them.

Given this, should we write off YouTube as unsuitable for sex edutainment dissemination? The obstacle is that if the issues for sex education dissemination lie beyond the specific governance of a single platform and are rooted in the culture that pervades it, these same cultural challenges are likely to apply to using most social media platforms to disseminate sex education content, not just YouTube. Paasonen, Jarrett and Light (2019) highlighted social media platforms often conflate sexual content with risk, the challenge for social media sex education is the lack of distinction between content that is sexual, and educational content about sex. Therefore, I do not believe these findings should lead to the dismissal of YouTube for sex education but instead be used to target improvements for further development. The findings from analysis of the comments on existing YouTube sex edutainment content highlight that this content is already being used successfully and is largely valued by the audiences who are utilising it. Therefore although the research has identified challenges that need to be addressed to increase the impact of this content, the content is still being utilised and providing support to audiences.

In addition, the voices of young people participating in this research resonate loud and clear in telling us that their RSE experiences are not adequately preparing them for the reality of participating in intimate relationships. They are also telling us they are living in a digital world where they actively use the internet to seek information and support their peers. The findings from this study relating to the affordances of YouTube sex edutainment, particularly the possibility that this content could be used as a form of

digital peer education, could have useful ramifications for health education in meeting young people's needs in ways that suit their digital lives and utilise the networked publics they belong to. Therefore, whilst this research has identified problems that need addressing, the potential identified in YouTube sex edutainment suggests the platform should not be written off.

Whilst the creation of a brand-new platform with open policies around sex edutainment content could be suggested, funding for sexual health prevention has suffered greatly from austerity cuts in the UK (Health and Social Care Committee, 2019), and as one young person in this study succinctly emphasised: '*everyone knows what YouTube is*'. Therefore, as the adage goes, 'why reinvent the wheel?'. To create, market and disseminate a new platform would require significant funding and time, however, as part of the creation of their Health Partnerships department, YouTube have made clear their intention for their platform to be seen as a valid location for health information seeking. If YouTube have this intention there is an opportunity to open a dialogue around how the convergence of their policies and algorithms may discriminate against sex edutainment content due to a lack of 'human discretion' (Graham, 2004) with the aim to improve their ability to be a digital sexual health learning ecology.

8.4 Implications for the key actors

This research has focused on YouTube sex edutainment through the examination of each of the three key actors who assemble in its creation and use. Therefore, the findings of the research have implications for each of these key actors in the YouTube sex edutainment assemblage, and the following paragraphs will reiterate the implications and any recommendations for policy and practice relating to each actor.

YouTube

The YouTube health partnerships department is a development in YouTube positioning itself as a credible source of health information. This thesis has discussed the ways that the features of YouTube are beneficial to the sharing of sex education content. As a dominant force in video-sharing and one of the largest websites on the internet, YouTube are uniquely positioned to spearhead their platform as a learning ecology. However, this research has also raised challenges caused by YouTube governance and algorithms for the dissemination of sex, relationships and sexual health content on

its platform, particularly through the demonetisation and restriction of this content and concerns about misinformation.

It is recommended that YouTube, in developing their new health partnerships team, should review their community guidelines and flagging practices around sex edutainment content to avoid mistaking age-appropriate educational content for 'sexual content' and restricting potentially valuable resources from reaching young people who may benefit from them. YouTube need to interrogate the current age restriction model and how their machine learning systems separate and define sexual content in comparison to educational content about sex, which is currently causing significant challenges for this form of content. Otherwise, it is possible that this form of learning may migrate onto other platforms and away from social media, as interviewed influencers expressed frustrations that YouTube make doing their work harder, and they must rely on hosting content elsewhere. This compliments Perez's recent (2021) suggestion that social media companies should '*collaborate closely and actively with sexual health experts to establish appropriate content moderation policies for sexual health content*' (p.4)

Beyond this, where content is deemed inappropriate for under 18s, YouTube are in the unique position to review the role that demonetisation plays in influencers content creation. I recommend that YouTube consider offering monetisation opportunities for those making videos that are age restricted as restrictions are affecting a broad range of content that could still be paired with advertisers, as lack of monetisation options forces influencers into private agreements with private commercial brands and to seek out additional funding options which may put off audiences, reduce their trust in influencers and lose their interest from engaging with content at all. This is as important for YouTube as it is for the influencers themselves because it is causing creators to consider leaving the YouTube platform in search of an alternative that will not penalise from for the content they are creating.

In addition, it is recommended that YouTube engage in considering how they can further improve the moderation of comments to ensure their platform is a safe space for young people engaging with health information as, although processes are already in place, the findings from the comment analysis in this thesis have highlighted

concerns around some incidences that have not been picked up by the current algorithms and may not make YouTube a safe space for young people.

Finally, as part of their Health Partnerships team, it is recommended that as YouTube continue to expand the algorithmic auto-tagging system that currently identifies COVID-19 and HIV to also link content around other sexual topics such as sexual dysfunction, cervical or testicular cancer, and all other STIs. This could provide additional credibility by signposting to information from reputable sources to support the learning that takes place on their platform. YouTube may wish to do this through the creation of a YouTube Health or YouTube Learning app in a similar manner to their existing YouTube Kids sub-platform that could be a hub collating, managing, and promoting content that is accurate, educational and valuable, with additional walled safety features designed to limit the spread of misinformation. It is the researcher's intent to make a separate report to be delivered to YouTube and their Health Partnerships team to engage them further with these recommendations and how the findings apply to their goals around the use of their platform for health information seeking.

Influencers

The findings of this research lay the groundwork for the potential expansion of YouTube sex edutainment as a peer education resource which may have benefits for Sex edutainment influencers in the expansion of their work and development of their professional opportunities. The health influencer framework has also revealed new ways of thinking about influencers and how they can be used within the field of health. This expands understandings of who is a valuable social media influencer beyond just the number of followers they have and considers the different ways that digitally mediated influencers fit into existing forms of health influence. This may expand opportunities for sex edutainment influencers, and other social media health influencers.

Although time commitment may be a barrier, research participation may be beneficial for influencers. YouTube sex edutainment influencers may also find it beneficial to

develop relationships with public health organisations and charities to build their credibility with new audiences and create new opportunities in health education. In addition to improve the confidence of young people in influencer sex edutainment content, influencers should consider including their qualifications, and information sources in their video descriptions.

Social media influencers are already engaged in a delicate balance of managing their commercial interests in a way that reduce their perceived authenticity by their audience (Cunningham & Craig, 2017) however, influencers may wish to focus on cultivating relationships with other potential funders in the charity or public health sector. Finally, the recommendation that public health organisations create partnerships with YouTube sex edutainment influencers and develop resources should aid in supporting these influencers in creating suitable content for their audiences, as without the influencers the content and parasocial relationships built would not exist.

Young People

This research has interrogated a novel method of independent sexual health learning that utilises existing social media structures and influencer/audience relationships to understand the possibilities and problems for its suitability with young people aged 13-24-years-old. YouTube sex edutainment content may provide additional information and learning opportunities to fill gaps from school based RSE for young people who feel their current RSE experience does not meet their information needs. As young people are already living digital lives where they exchange information and peer-support with their friends online, the findings of this study provide a new way of understanding how young people can independently educate themselves and share with their peers to educate each other, complimenting the networked publics they already engage with, using technologies they are comfortable with, to expand their learning about sex, relationships and sexual health beyond the classroom.

8.5 Implications for public health organisations

This research has looked at the possibilities and problems of YouTube sex edutainment. The research identified three current key actors in the assemblage; YouTube, sex edutainment influencers and young people and as this chapter has

discussed some of the challenges for the use of this content relate to funding, misinformation and platform governance. However, through the literature and findings from the survey data with young people, there appears to be opportunities for the engagement with public health organisations or charities (e.g. Brook, Sex Education Forum, Sexpression:UK, Fumble, etc). Young people valued reliable sources of information online from recognisable organisations such as the NHS, childline, Brook and the NSPCC) and the systematic review also found studies involving partnership with researchers or a health organisation had the least risk of misinformation. Therefore, although this is speculative, it is important to note, based on the findings across this study, an indication that health organisations or charities becoming involved as a fourth actor in this assemblage could add value and address some of the identified problems of YouTube sex edutainment content.

Public health organisations are not currently a key actor in the YouTube sex edutainment assemblage. However, by entering the assemblage as a fourth actor public health organisations may be able to provide solutions to the problems currently limiting YouTube sex edutainment's potential. This could also provide organisations with new, accessible, and innovative methods of disseminating sexual health information to young people that reflect the digital world they inhabit.

The findings of this research lead to the following recommendations for policy and practice with public health organisations. Firstly, public health organisations should consider commissioning future interventions that make use of the skills and experience of social media influencers as health influencers with a wide audience reach. This may provide an affordable alternative to traditional peer education interventions and allow organisations to curb the spread of misinformation by providing credibility and knowledge to the partnerships. A co-design process with YouTube, sex edutainment influencers, organisations and young people is recommended moving forward. Secondly, health organisations and charities may be able to raise the profile of YouTube sex edutainment content. This could potentially be done by helping schools, young people, parents, and educators locate trustworthy content through the development of vetted lists of YouTube sex edutainment videos on a variety of topics. Beyond this, providing training for YouTube sex edutainment influencers (and those on other platforms) could provide a way to reduce the potential spread of

misinformation, while also enabling content creators to better meet the information needs of their audiences, and raise young people’s confidence in these digital resources.

In the introduction of this thesis I demonstrated through figure 2 (below) how through an ANT lens the three key actors in YouTube sex edutainment could be considered to mutually shape one another:

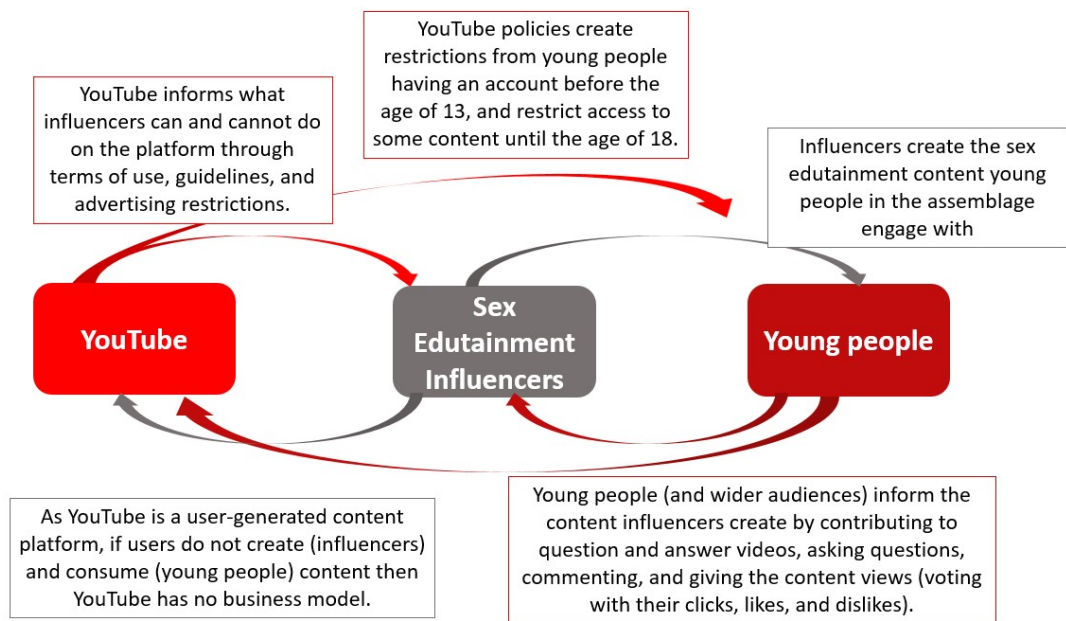


Figure 2 - The mutual shaping of YouTube sex edutainment key actors suggested by the researcher.

However, the implications of this research suggest that public health organisations have the opportunity to become a fourth actor in the YouTube sex edutainment assemblage, with the addition of public health organisations strengthening and extending the current YouTube sex edutainment assemblage. By extending the original diagram in figure 29 we can see how this might take shape:

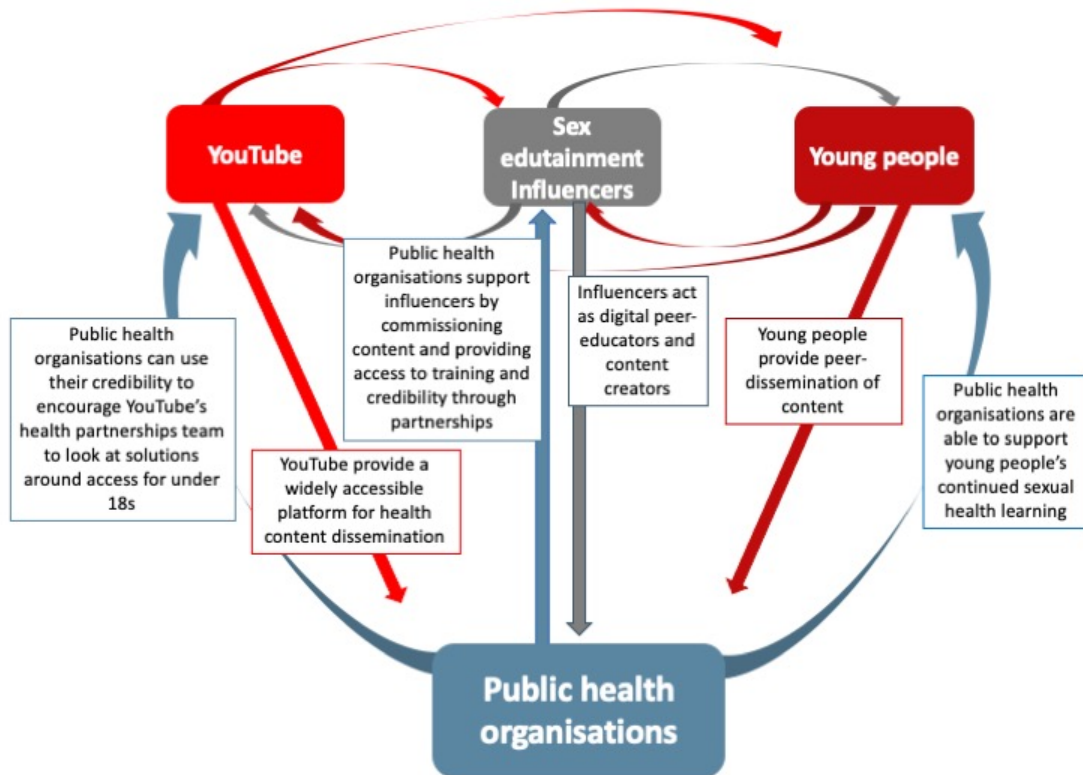


Figure 29 – Extending the YouTube sex edutainment assemblage with public health organisations

This extension could provide a mutually shaping and strengthening assemblage for all actors involved. Therefore, organisations with an interest in sexual health, and young people's sexual and relationship wellbeing may benefit from becoming involved with YouTube sex edutainment as a key actor.

8.6 Challenges and limitations of this research

There are a number of limitations to this research and challenges that have been encountered in the research process. The main limitation of this study is the small sample of participants. The online surveys conducted with young people had limited respondents, with n=50 13-18-year-olds and n=35 19-24-year-olds, a smaller sample than was hoped for at the design stage of this research. However, unfortunately due to the impacts of COVID-19 I was unable to work as extensively with schools for

recruitment as intended. Due to the small sample and self-selecting convenience no assumptions can be made that the results are representative of all young people.

In addition to the sample size, recruitment for the online survey with young people was predominantly conducted via social media, particularly for the 19-24-year-old cohort. This may lead to a bias towards social media as these young people were already social media users and may not represent the views of other young people who do not participate on social media platforms. Whilst schools were approached for recruitment of 13-18-year-olds in an attempt to limit potential bias, it is not possible to determine how many of the respondents in the younger cohort were recruited by which means. Although the findings from this survey about internet and social media usage are similar to those found in other larger national studies (Rich et al., 2020), this potential for bias should be acknowledged.

Moving away from the young people, the choice to reach out to influencers for this research ran a high risk of non-participation. Due to their large followings, it can be hard to reach to influencers due to getting lost in the 'noise' of their inboxes. Influencers also may have limited time or interest in participating in research. Unfortunately, in the case of this research it led to limited participation from YouTube sex edutainment influencers in the email interviews, with only three respondents. This limits the scale of findings and although interesting and useful insights were provided from this data, it was a minimal dataset. Previous studies into sex edutainment influencers, like Johnston's (2017) work, tend not to feature interviews or input from influencers themselves. It is hard to say if this is due to intentional methodological design or a lack of interest in participating from this community of content creators as Johnston does not discuss methodology and if data collection was ever considered as a research strategy. Due to the small number of respondents in parts of the study, this research should be viewed as a preliminary exploration into the assemblage of YouTube sex edutainment, rather than a comprehensive overview of all viewpoints available.

The journey of this research has also expanded and developed my own understanding on influencers and how they are identified. Although the definitions originally used for influencers (such as having 40,000+ followers) were based on an initial scoping of sex edutainment content on YouTube, the novel health influencer framework now provides

more expansive and evolved understanding of social media influencers and their role in health influence. Therefore, the selection of influencers for phase 2 and defining influencers in phase 3 are no longer fitting with my expanded understanding of influencers since developing the health influencer framework. If repeating this study, I would recommend the use of the health influencer framework in the identification and selection of influencers.

In addition, shortly before the submission of this thesis it was noticed that one of the influencers included in the study who responded to the email interview and whose videos had been included with comment analysis has since deleted a large amount of their former content from their channel that had qualified them to meet the inclusion criteria. This demonstrates the challenges of researching a non-static social media platform where content, algorithms, community guidelines and features can be instantly changed. As is often the case with the fast-paced moving nature of social media research, it is a snapshot, which is why the walkthrough was repeated for a second time in this research to identify the evolution of the platform. YouTube has gone through many advancements since it was launched in 2005, and the nature of the changing landscape suggests it will continue to evolve.

8.7 Further research opportunities

This study has laid the groundwork for future research into YouTube sex edutainment. This chapter has started to identify how future research may begin to work on dismantling the problems identified to make use of the possibilities that have been noted in the findings of the study.

Having identified that YouTube sex edutainment influencers may be viewed as role models by some audience members further research is required to expand on this study to explore how YouTube sex edutainment content might be used as an alternative digital peer education resource. I recommend that any future studies of this nature be a co-creative intervention between researchers, young people, influencers, YouTube, and public health organisations or charities. As, although this research has sought to understand the YouTube sex edutainment assemblage through analysing the key actors, it is not an intervention design, and the actors at the centre of this

assemblage should be stakeholders in the design of a successful intervention that meets their needs through a co-design process.

This study also identified that whilst the YouTube comments analysed showed YouTube sex edutainment content to be well received and have positive benefits for those using it, the British young people surveyed, despite having a reliance on the internet to find information on sex, relationships, and sexual health, are not yet fully utilising YouTube sex edutainment content. This may be due to concerns about misinformation or lack of awareness. There is opportunity for future research to be conducted to create a list of recommended existing videos that have been fact checked and are relevant to specific sex education topics. Conducting this research in partnership with organisations would provide the credibility of organisations that young people know they can trust. Further opportunities include development of training materials for sex edutainment social media influencers, and resources to aid young people in identifying health misinformation on social media.

Finally, the systematic review conducted in this thesis indicates that the use of influencers in healthcare interventions is a new and developing field, and further research is warranted in developing a deeper understanding this health influence, how it is created, maintained and the possibilities for its use. The development of the new health influencer framework supports these opportunities and can be used to give researchers a starting point for developing studies in this growing field and a way of understanding how social media influencers can fit into and extend existing forms of health influence.

8.8 Original contribution to knowledge

Through the tracing of connections between the three key actors in the assemblage of YouTube sex edutainment; YouTube, Influencers and young people, this thesis has identified some of the possibilities and problems of this potential social media intervention and developed understandings of how it can be improved in future. This research has also made several original contributions to knowledge.

Firstly, this thesis has provided a unique contribution to the study of YouTube sex edutainment, as the first in-depth empirical study to analyse the affordances and

limitations of this form of sexual health content. As such it expands on the work of Johnston (2017) who drew attention to YouTube sex edutainment and the role of celebrity and fandom within this YouTube culture from a theoretical standpoint.

More importantly, the findings of this research point to the novel possibility that YouTube sex edutainment has the potential to be used as a form of digital peer education due to the peer-to-peer sharing processes young people engage with. Further to this, the findings in this research support the possibility that YouTube sex edutainment influencers could be used as alternative peer educators for independent sexual health learning. Although the challenges of conducting sexual health learning on YouTube mean that there are hurdles to overcome, these findings around the possibilities of influencers to act as peer educators and the potential of peer-sharing of content between young people could have much wider reach than traditional classroom-based RSE, especially for topics inhibited by the cultural narratives around RSE. Furthermore, although YouTube has had Sex edutainment influencers creating content for longer than many of today's other popular social media apps have been in existence (e.g., sex edutainment influencer Laci Green has been posting relevant content on YouTube since before Instagram and TikTok were launched) the findings around the peer education potential of influencers and YouTube sex edutainment content may extend beyond YouTube to other social media platforms where influencers create sex edutainment content. This opens up an exciting new avenue of research into social media influencers as sexual health peer educators both on YouTube and beyond.

In addition, this thesis makes a new contribution to the small, but growing, field of research around the role of influencers in health education, not only through the findings of this research, but through the systematic review conducted in [section 3.7](#) which is, to the authors knowledge, the first systematic review of social media influencers in health communication and education.

Beyond the context of sexual health, this study has expanded knowledge on health education in informal digital spaces and added to the body of knowledge discussed in [section 3.1](#) around YouTube as a learning ecology.

Finally, this thesis also extends scholarship around social media influencers and their role in health influence through the creation of the health influencer framework. This framework also provides a unique contribution to aiding health researchers by providing a way of understanding influencers and a starting point for defining and differentiating between different types of social media influencers.

8.9 Conclusion

This thesis has interrogated the possibilities and problems of YouTube sex edutainment content using an Actor-Network Theory approach. The indication that YouTube sex edutainment is likely to be a valuable peer education resource has opened doors to researching social media influencers as parasocial peer educators. The thesis has identified that there are benefits to the use of YouTube sex edutainment content, and that this content is already being used by some audiences. Meanwhile, the recommendations have been made, particularly for YouTube as a platform to expand their Health Partnerships work in light of the findings from this thesis. In addition, the opportunity for public health organisations to become a fourth actor in the YouTube sex edutainment assemblage has been suggested for future work to overcoming some of the challenges that currently cause problems in the dissemination of YouTube sex edutainment. However, we must remember that repackaging sex education content into a new platform does not offer an immediate solution to the deeply pervasive cultural narratives around sex and young people that have historically limited the teaching around sex education. The development of any sex education intervention, particularly those that relate to minors, needs to recognise the challenges arising from discourses around sex, risk, and protectionist narratives, and this tracing of connections around YouTube sex edutainment has identified that YouTube is no different as these narratives also permeate our digital environments.

However, whilst this study has highlighted hurdles and challenges for YouTube sex edutainment, it has also supported the suggestion of Johnston (2017) that through the use of specialised influencers; *'Sex education on YouTube, then, can be seen not only as an extension of the programs taught in schools but also as a community that continues to inform and share insights into sexuality long after young people have passed through the classroom doors.'* (p.90) and this opportunity for continued sexual

health learning with YouTube is one which warrants further exploration in research and attention from public health organisations and charities.

Young people deserve access to RSE that meets their information needs and prepares them for the reality of participating in intimate relationships. At present their RSE is leaving them unprepared and seeking information themselves. Whilst YouTube sex edutainment comes with its own challenges that need to be addressed before it can be utilised on a larger scale as a targeted sexual health and wellbeing resource, the voices of those responding to the existing content confirm that YouTube sex edutainment is a step in the right direction:

‘This is the sex education we all deserved in school and absolutely none of us got.’

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Appendices

Appendix A – Executive summary of Masters Research

Appendix B – Systematic Reviews Table

Appendix C – Ethical Approval

Appendix D – Survey Question Development

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Appendix I – Conducting the systematic review

Appendix A – Executive Summary of Masters research

Declaration: *this executive summary contains material submitted for a successful MA degree in Gender, Media & Culture at Goldsmiths College, University of London in 2017 from the dissertation: ‘Oh the shame of ‘it’’: Digital pathways to creating age-appropriate, emotionally-aware, ‘21st Century’ Sex and Relationship Education in the United Kingdom. Any material used here is for illustrative purposes.*

Introduction

In 2017 I conducted a small empirical study for the dissertation of a Masters degree. The research explored how children were taught about gender, sex and relationships both in school and at home. The research considered historic debates in sex education whilst questioning how digital media can be utilised to support adults in how they approach and deliver RSE. By considering how British RSE traditionally responded to moral sex panics and narratives of innocence creating a narrative of shame around sexuality, particularly female sexuality, the dissertation discussed the possibilities of using digital technologies to pave a way to an emotionally-aware SRE system built on young people’s existing digital habits. To obtain further understanding on this concept parent and teacher perspectives on RSE and digital resources were gathered and analysed.

Below are the research questions used to guide this research:

| Key research questions: | |
|---|--|
| <ul style="list-style-type: none"> • How can digital media resources be utilised for both at-home and institutionalised RSE in the United Kingdom? • What is the current state of UK RSE provisions both in schools and homes? | |
| Parent specific research sub-questions: | Teacher specific research sub-questions: |
| <ul style="list-style-type: none"> • Is there a correlation in parent perspectives on RSE? <ul style="list-style-type: none"> • Are parents for or against comprehensive, emotionally aware RSE? <ul style="list-style-type: none"> • How do parents conduct conversations with their children about sex and relationships? • What is the parent relationship to RSE resources? (Both traditional and digital) • What digital media are children and young people engaging with most frequently? | <ul style="list-style-type: none"> • How consistent are schools in their training for and delivery of RSE? • How do teachers feel about teaching RSE? <ul style="list-style-type: none"> • What resources do educators find most useful? |

The research used a similar, but less extensive, body of literature to those explored in this thesis to identify the debates and history of RSE and drew on work related to digital sex education interventions (Johnston, 2017; Waldman & Amazon-Brown, 2017; Herbst, 2017; Van Heijningen & Van Clief, 2017) before exploring how these forms of resources fit into the perspectives and practicalities of parents and teachers through the data collection.

Methods

Two online surveys were conducted using Google Forms. The first was a mixed-methods survey with both qualitative and quantitative questions for parents of UK children aged 4 – 18-years-old which had 65 respondents, and the second was a quantitative survey for teachers in the UK who had taught RSE to children aged 4 – 18-years-old which had 48 respondents. The parent survey was distributed online using a variety of digital parent spaces: Netmums forums, a UK-wide dad’s forum and Facebook groups for parents in London, Harrogate, Kent & Surrey, Manchester and Durham. These Facebook community groups were selected due to their large numbers of members, their opportunity to disperse the survey across a range of local education authorities and their willingness to display and share the digital opinion survey. The teacher survey was distributed via digital teacher-specific spaces such as the TES community and Teacher Talk forums as well as my own network of contacts with teaching professionals.

In addition, to add qualitative depth four semi-structured interviews were conducted with parents of young people aged 4 – 18-years-old to understand the intricacies of their opinion and experience on RSE, their childrens digital media use and digital RSE resources. All four interviewees were mothers.

Findings

The majority of parent respondents had children under the age of 10, with fewer respondents having older teenage children.

How old is your child? (if you have multiple children please tick all boxes which apply)

65 responses

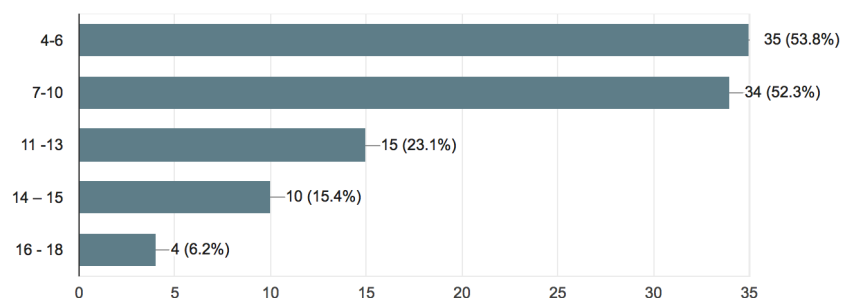


Figure 1 – How old is your child?

Parents held largely positive views about RSE.

Parents overwhelmingly agreed that their children should know about the emotional aspects of sex as well as biological with 93.8% of surveyed parents in agreement with this compared to only 3.1% in disagreement. Meanwhile 92.3% of the

parents disagreed with the statement “The less my children know about sex, relationships and sexuality the better”. These figures demonstrate a trend of positive attitudes amongst parents towards RSE. However, 38% of parents felt their child’s school did not teach them enough about sexual health, compared to only 15% of parents who felt their school was teaching enough on this topic.

One area where parent perspectives varied was the ideal time for children to begin RSE, as we can see in figure 2 below. However, what we can see here is that in general parent perspectives sway towards children starting this education younger at either 4-6 years or 7 –10 years of age.

At what age do think children should begin being taught about relationships, gender and sexuality in an age-appropriate manner?

65 responses

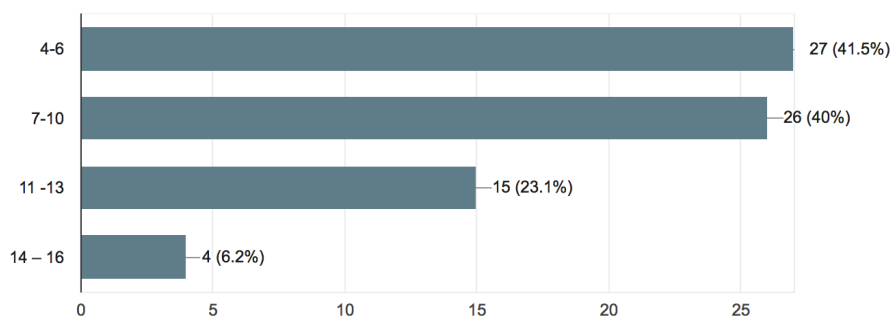


Figure 2 – At what age do you think children should begin being taught about relationships, gender and sexuality in an age-appropriate manner?

On what might be considered the more ‘controversial’ aspects, parent opinions were more unified than anticipated. 93.9% of parents agreed with exploring issues of consent in school, 73.8% of parents wanted their children to be taught about LGBT issues, with 15.4% unsure of their stance and 10.8% disagreeing with this position.

“I think the most important thing children need to know about is we’re all different but we’re all more common than we are different. Okay so there’s difference in relationships but its import to respect, to understand, to know and appreciate those differences. But actually, we all want to be loved and to give our love to somebody and that takes various shapes and forms.”

Although the majority of parents (66.1%) felt they had a clear idea of age-appropriate ways to discuss sexual health at different stages of their development 67.7% stated they would like more resources to help them navigate discussion of gender, sex, sexual health and relationships with their children. Only 30.7% of parents felt aware of the resources available to help them facilitate these conversations

89.2% of respondents stated that their child had access to a computer at home, although only 27.7% stated their children had access to a computer unsupervised and 38.5% said their child had their own personal smart phone, this may likely be due to the young age of their children. Many parents were concerned about their children having access to inappropriate materials online (84.6%) and 73.2% of respondents had discussed internet safety with their children to protect them against inappropriate relationships and content.

YouTube was the most popular social media platform that parents stated their children used, as can be seen below in figure 3.

What websites/social media does your child use regularly?

65 responses

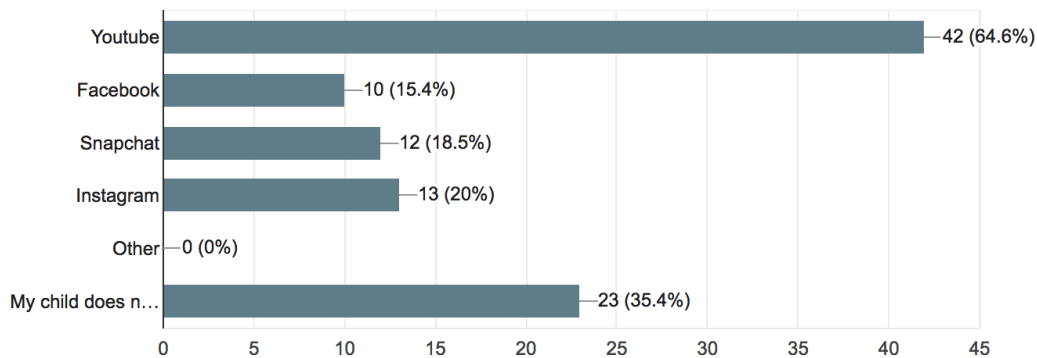


Figure 3 – What websites/social media does your child use regularly?

This may be due to YouTube’s popularity but also is likely because respondents largely had younger children who may be too young to have access to other social media platforms.

When asked which RSE resources would be most beneficial in supporting them to teaching their children about gender, sex and relationships, 70.8% of parents selected ‘digital resources’, yet when asked which resources they were currently using only 13.8% of parents were using digital resources (see figures 4 and 5 below).

Which resources do you feel would be most beneficial for you to educate your child about gender, sex and relationships? (tick all that are appropriate)

65 responses

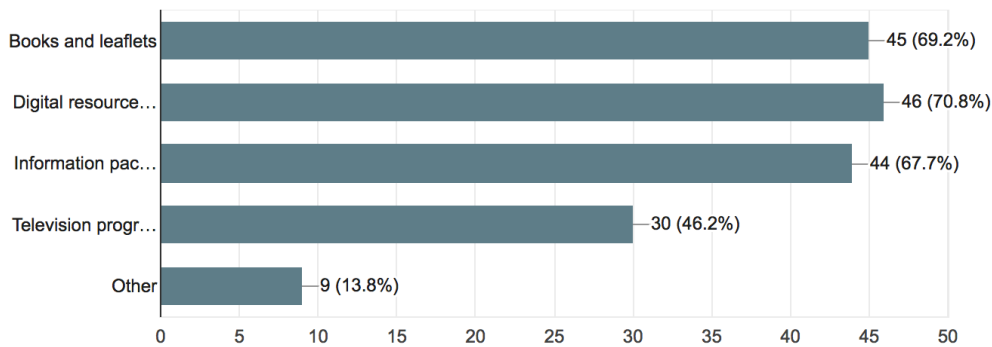


Figure 4 – What resources would be most beneficial to you

What resources do you currently use to educate your child about gender, sex and relationships? (tick all that are appropriate)

65 responses

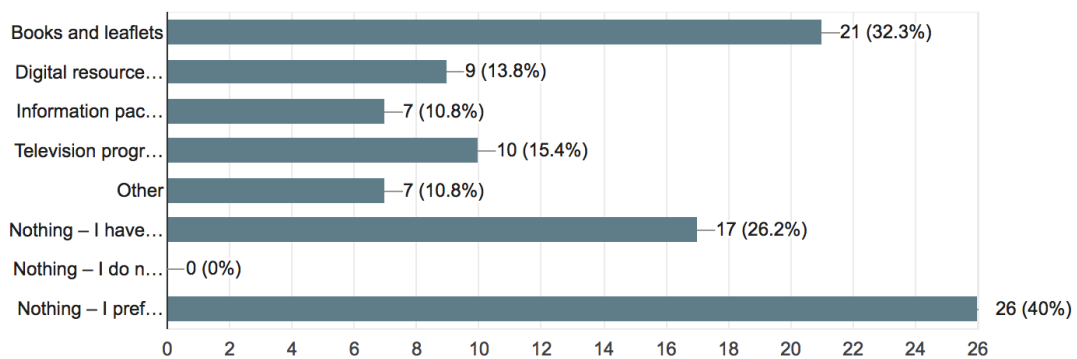


Figure 5 – What resources do you currently use

For 26.2% of parents this was because they had not yet had those conversations with their children, and 40% stated they chose not to use resources to support them in these conversations. Yet even those using resources appeared to be selecting books and leaflets over digital resources, despite digital resources being deemed the most beneficial type of resource in the previous question.

“I didn’t actually access anything on the Internet, funnily enough it never occurred to me to do that. I could have a look...yeah...”

When surveying teachers about their experience of teaching RSE, the quantitative data painted a picture of a school SRE system that is inconsistent, with some schools able to excel but many teachers noticed a lack of support and training. 68.7% of teachers surveyed said they had not been given specific training by their employer to teach SRE effectively, 58.4% of teachers felt they were not provided with a wide variety of resources to teach SRE by their school and 64.6% noted that their school did not provide parents with a variety of SRE resources for continued learning at home. Meanwhile as we can see from Figures 6, 7 and 8 below, schools are not consistent in providing clear SRE policy for teachers, curriculum time for SRE or emotional sexual health learning.

For all figures containing a rating scale 1 = strong disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree and 5 = strongly agree.

My school has a clear SRE policy that is easy for me to follow

48 responses

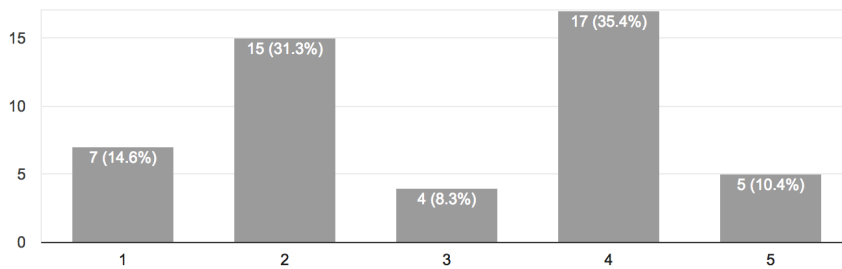


Figure 6 – *My school has a clear SRE policy that is easy for me to follow*

I feel the students at my school are given enough time in the curriculum to learn about SRE

48 responses

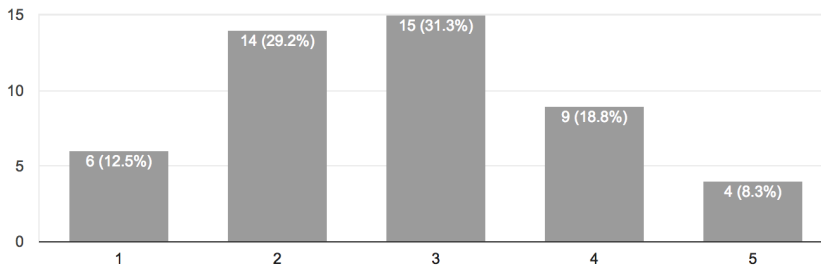


Figure 7 – *I feel students at my school are given enough time in the curriculum for SRE*

The school I work in teaches students about biological sexual health but not emotional sexual health

48 responses

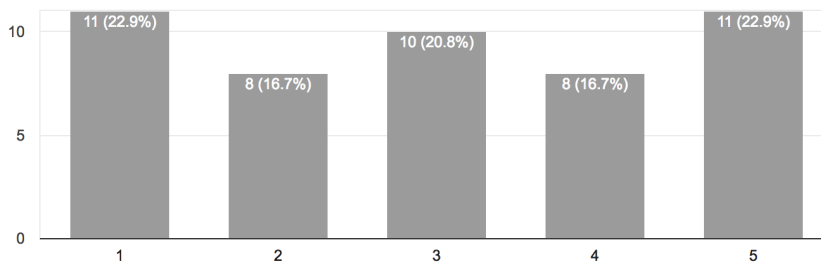


Figure 8 – Biological verses emotional sexual health teaching

This goes some way to explaining why the area where there was least correlation in parent perspectives was children’s school sex education, as based on this data collected from teacher perspectives it would appear that schools vary wildly in the level of their provisions for SRE. It is important to note that as teachers covered both primary and secondary school ages (see figure 9 below) this may also be part of the reason for the mixed responses to these questions.

How old are the children you teach? (if you teach multiple ages please tick all boxes which apply)

48 responses

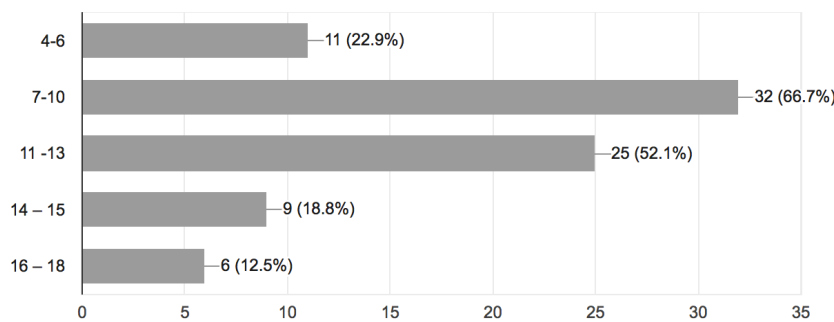


Figure 9 – How old are the children you teach?

Roughly how many lessons are children given on SRE at your school in their school career?

48 responses

It is interesting to note the variety of responses around how many RSE lessons teachers identified students receiving during their schooling, which varied considerably (see figure 10 adjacent), especially as 48.3% of teachers believed the majority of their students got their sex education at school.

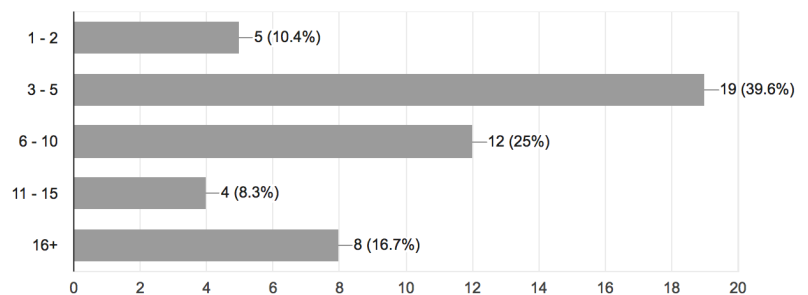


Figure 10 – Number of lessons students are given on SRE

When asked what resources they found most useful in facilitating discussion around RSE (figure 11) teachers had a significant preference for digital resources, with 87.5% selecting digital resources. In addition 83.4% of teachers identified that the school they worked in taught children about internet safety.

What resources do you find most useful in facilitating discussion around SRE? (select all that apply)

48 responses

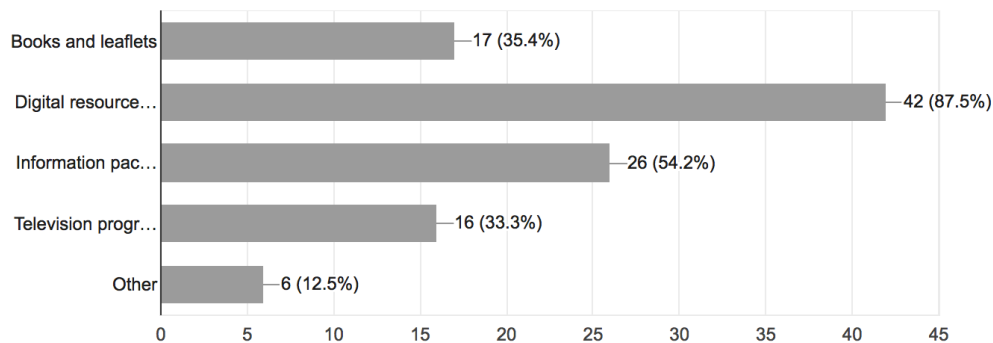


Figure 11 – What SRE resources do you find most useful?

Conclusion

Based on the understandings developed through this study, digital RSE resources may help to bridge the gap between school and home SRE for young people. Parents and teachers indicate that digital resources would be the most useful for them yet are currently slow to take these up. The development of these resources can utilise technology that young people are already comfortable with, and Johnston (2017) has noted the role that YouTube stars can take on with their audiences, their content can also be utilised by parents and teachers. Creating RSE resources through a popular platform like YouTube may offer young people who are being let down by insufficient school or home RSE to access the necessary information themselves and engage with that content through the site's social media features.

Interviewed parents repeatedly expressed that they were happy for their children to learn all about sex and relationships so long as this information was presented in an age-appropriate way, therefore the development of a programme of age-appropriate digital videos, for example, which look at RSE topics in stages appropriate for each age and slowly build on these over time may provide a strong amenity which could be used in homes and schools to provide young people with 360 degree RSE support.

Limitations of this study

There are several limitations to this study that should be taken into consideration. This was a small-scale study with a self-selecting convenience sample and should not be considered representative of UK parents as a whole. Particularly as demographic data was not collected in this research, meaning that certain groups may be under or overrepresented in these findings. In addition, as the respondents were self-selecting, they may have chosen to participate if they are more comfortable with RSE and have an interest in the topic, which could bias results. Due to the use of an online survey there may also be a bias towards digitally active parents and teachers, who may preference digital resources compared to those who are not active on the internet.

Finally, a major limitation of this research is that it did not engage in dialogue with young people themselves to understand their perspectives on RSE resources, future iterations of this research will move towards understanding the perspectives of young people to see if digital resources such as YouTube content are of interest and benefit to young people and the way they look for RSE information.

Appendix B - Systematic reviews table

Reviews included post 2000

| RSE reviews | | | | | |
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| Authors & Year | Types of paper included | Dates covered in review | Aims | Findings | Recommendations relating to this study |
| Lameiras-fernandez et al (2021) | Peer-reviewed only, Meta-analyses and systematic reviews only, 10-19 year olds primary focus, school based digital based or blended learning interventions, studies related to minority or specific groups were excluded. | 2015 - 2020 | To provide an overview of what is known about the dissemination and effectiveness of recent sex education programs and thereby to inform better public policy making in this area. | Interventions focused mainly on reducing risk behaviors, whilst obviating themes such as desire and pleasure, which were not included in outcome evaluations. The reviews with the lowest risk of bias are those carried out in school settings and are the ones that most question the effectiveness of sex education programs. Whilst the reviews of digital platforms and blended learning show greater effectiveness in terms of promoting sexual and reproductive health in adolescents (ASRH), they nevertheless also include greater risks of bias. | A more rigorous assessment of the effectiveness of sexual education programs is necessary, especially regarding the opportunities offered by new technologies, which may lead to more cost-effective interventions than with in-person programs. Moreover, blended learning programs offer a promising way forward, as they combine the best of face-to-face and digital interventions, and may provide an excellent tool in the new context of the COVID-19 pandemic. |
| Pound et al (2017) | (Synthesis of research findings with review of reviews and qualitative synthesis) International, systematic reviews or meta-analyses of RCTs, cluster randomised trials or studies using a quasi- | 1990 - 2016 | To identify what makes SRE programmes effective, acceptable, sustainable and capable of faithful implementation. | The study combines a number of factors on RSE provision including characteristics of good interventions, who should deliver them, outcomes, youth perspectives and more. | There are multiple suggestions from this study that are valuable for this research, specifically relating to young people's perspectives on what is missing from RSE and preferred methods of receiving RSE. |

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| | <p>experimental design, and of interventions targeting 4–19 year olds in full-time education, school-based sexual-health interventions, school-linked sexual health services, interventions combining alcohol use and sexual health education, or interventions to combat multiple risk behaviours. PLUS OTHER FACTORS</p> | | | | |
| <p>Goldfarb & Lieberman (2021)</p> | <p>Qualitative or quantitative studies evaluating outcomes of school-based, K-12 educational approaches, within sex education or across the curriculum, U.S. based, focused only on pregnancy and disease</p> | <p>1990 - 2020</p> | <p>To understand the effectiveness comprehensive sex education efforts beyond pregnancy and sexually transmitted disease prevention</p> | <p>“Outcomes include appreciation of sexual diversity, dating and intimate partner violence prevention, development of healthy relationships, prevention of child sex abuse, improved social/emotional learning, and increased media literacy. Substantial evidence supports sex education beginning in elementary school, that is scaffolded and of longer duration, as well as LGBTQ-inclusive education across the school curriculum and a social justice approach to healthy sexuality.”</p> | <p>“Review of the literature of the past three decades provides strong support for comprehensive sex education across a range of topics and grade levels. Results provide evidence for the effectiveness of approaches that address a broad definition of sexual health and take positive, affirming, inclusive approaches to human sexuality. Findings strengthen justification for the widespread adoption of the National Sex Education Standards.”</p> |

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| | prevention programs | | | | |
| Leung et al (2019) | Must detail and evaluate evidence-based RSE programmes, Be based in the USA, UK, China, Hong Kong or Taiwan, | Date range of literature used is not provided. | provide a comprehensive literature review of the existing sexuality programs in selected places in both English-speaking (i.e., the United States of America, the United Kingdom) and Chinese-speaking contexts (i.e., Hong Kong, Mainland China, and Taiwan). | Findings are broken down based on each country and there is little comparison. Some key findings of the UK were: Using a meta-ethnographic method reviewing 55 publications mainly from the UK, the current SRE was criticized for its lack of statutory status, outdated government guidance and the observation that one-third of UK schools delivered unsatisfactory SRE. These problems are attributed to two main reasons. First, schools overlooked the emotional laden and unique nature of sexuality. As a result, the curriculum was taught in a way similar to that of any other academic subjects. Second, there is a reluctance to accept that sexual activity is high in some adolescents. This results in a discrepancy between what is taught and what students are experiencing. Moreover, the current SRE content fails to address contemporary sexuality issues. | “sex education policies and programs should be developed based on scientifically evidence-based theories related to contemporary adolescent development theories and ecological models. Moreover, there is a dire need to equip implementers (e.g., teachers and social workers), as well as parents with the necessary skills to enhance the effectiveness of sex education programs. In addition, in order to gain a more informed perspective as to which factors contribute to program effectiveness, methodologically rigorous evaluation studies adopting both quantitative and qualitative methodologies using longitudinal designs should be employed. Also, databases containing effective programs and measures should be established for more effective dissemination of informed practice. Finally, to promote sexual wellbeing among adolescents in today’s contemporary society, program implementers should take into consideration the complexities of sexual development during adolescence and include topics such as gender, diversity, relationships, empowerment, and consent into existing curricula, rather than merely focusing on the biological aspects of reproduction.” |
| Fonner et al (2014) | Peer-reviewed, low-middle income country, school-based interventions related to HIV prevention, with results from experimental design, and language. | 1/1/90 – 6/6/10 | systematic review and meta analysis on the efficacy of school-based sex education interventions in changing HIV-related knowledge and risk behaviors in low- and middle-income countries | This review found that school-based sex education is an effective intervention for generating HIV-related knowledge and decreasing sexual risk behaviors among participants, including delaying sexual debut, increasing condom use, and decreasing numbers of sexual partners. No individual study found detrimental effects of school-based sex education on increased risky sexual behavior, regardless of comprehensive or abstinence-only. | “1) Intervention evaluations need to go beyond addressing the question of whether school-based sex education increases knowledge and focus instead on understanding implementation factors that led to the most success in shaping and changing subsequent HIV-related risk behaviors. 2) school based education alone cannot be relied on to prevent HIV infections among young people since not all young people attend school and since school funds and resources are often already strained. Instead, school-based sex |

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| | | | | | education should be part of more holistic HIV prevention intervention aiming to engage young people in learning about and shaping their sexual and reproductive future.” |
| Rabbitte & Enriquez (2018) | English language, child (under 18s), United states only, national policy related. | Jan 2000 – December 2017 | to examine the role of policy on sexual health education | The review noted that policy varies greatly and that although there were high levels of support for comprehensive sex education (CSE) policy among parents and public health organisations, politicians did not allocate funding to support this, and abstinence only education received federal funding whilst CSE did not. | “Future research should focus on strategies to empower parents and voters to address mandates for abstinence only education. Effective interventions are needed that can help parents and citizens work to change policy and advocate to help forge the path for comprehensive sex education.” |
| Mason-Jones et al (2016) | RCTs, must evaluate school-based programmes aimed at improving the sexual and reproductive health of adolescents, international | 1990 to 7 April 2016 | To evaluate the effects of school-based sexual and reproductive health programmes on sexually transmitted infections (such as HIV, herpes simplex virus, and syphilis), and pregnancy among adolescents. | Most of the studies found related to Sub-Saharan Africa (5/8). Findings found there is little evidence that educational curriculum-based programmes alone are effective in improving sexual and reproductive health outcomes for adolescents. Incentive-based interventions that focus on keeping young people in secondary school may reduce adolescent pregnancy but further trials are needed to confirm this. | There is a continued need to provide health services to adolescents that include contraceptive choices and condoms and that involve them in the design of services. Schools may be a good place in which to provide these services. |
| Lopez et al (2016) | RCTs only, Under 19s, middle school or high school only, international, intervention had to emphasize one or more effective methods of contraception, primary outcomes were pregnancy and contraceptive use. | Information not available | To identify school-based interventions that improved contraceptive use among adolescents | This publication focuses only on those RCT’s with moderate quality evidence and an intervention effect out of the literature that met the selection criteria. The studies all had positive effects on contraceptive use. | Across the literature reviewed the overall quality of evidence was low. Main reasons for downgrading the evidence were having limited information on intervention fidelity, analyzing a subsample rather than all those randomized, and having high losses. |

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| Kirby, Laris & Rolleri (2007) | Ages 9 – 24, 100+ sample size, measure impact on specific changes, measure behaviour changes for at least 6 months, experimental/quasi design, be a curriculum or group based intervention (not 1-to-1), | 1990 - 2006 | To answer: What are the effects, if any, of curriculum-based sex and HIV education programs on sexual risk behaviors, STD and pregnancy rates, and mediating factors such as knowledge and attitudes that affect those behaviors? What are the common characteristics of the curriculum-based programs that were effective in changing sexual risk behaviors? | “Two thirds of the programs significantly improved one or more sexual behaviors. The evidence is strong that programs do not hasten or increase sexual behavior but, instead, some programs delay or decrease sexual behaviors or increase condom or contraceptive use. Effective curricula commonly incorporated 17 characteristics, and programs were effective across a wide variety of countries, cultures, and groups of youth.” | “1)Communities should implement curriculum-based sex and HIV education programs, preferably those proven to be effective with similar populations or those incorporating the 17 characteristics of effective programs. 2)Because these programs can reduce sexual risk-taking by a modest amount, communities should not rely solely on these programs to address problems of HIV, other STDs, and pregnancy, but should view them as an important component in a larger initiative that can reduce sexual risk-taking behavior to some degree.” |
| Ganji et al (2017) | English or Persian language, Published or unpublished studies, must relate to children under 12 | 1970 - 2015 | To assess what is already known about sexuality education targeting children under 12 years old, both relating to policy or practical issues. | Literature fell under three main categories; “sexuality-related knowledge, attitudes, and parents’ skills to manage children’s sexual behavior and related education. Employed approaches to children’s sexuality were reported to be effective in developing healthy sexual behavior in children. Education was identified as the primary focus of the included packages and guidelines. Parents were recognized as first line educators in SE. However, interventions aiming to improve parents’ skills in SE for children were limited. In other words, developing skills in parents, and their competency in children’s sexual behavior management were not specified in the existing programs.” | Parents’ skill-building must be the focus of SE programs in order to address children’ sexual development goals. |
| Acharya, Van Teijlingen & Simkhada (2009) | Not clear if only Nepalese as exclusion criteria not included, included | 1987 - 2008 | Identify and address opportunities for and challenges to current school-based sex and | “Limitations to teaching including lack of life skill-based and human right-based approach, inappropriate teaching aid and reliance on conventional methods, existing policy and practice, parental/community | The notes and interest on peer-education, partnership with parents, diverse methodology in teaching etc are all of interest to this research. |

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| | journals, grey literature and documents published by international health organisations. | | sexual health education in Nepal. | support, and lack of research into and evaluation of sex education. Diverse methodology in teaching, implementation of peer education programme, partnership with parents, involvement of external agencies and health professionals, capacity building of teachers, access to support and service organisation, and research and evaluation in sex education have been suggested for improving the current practice of sex and sexual health education in Nepalese schools” | |
| Marseille et al (2017) | evaluated the effect on pregnancy rates of programs delivered in elementary, middle, or high schools, USA and Canada, RCTs and non-RCTs. | 1985 - 2016 | To evaluate the effects of sex education programmes on pregnancy rates with children up to high school age in North America. | Ten RCTs and 11 non-RCTs conducted from 1984 to 2016 yielded 30 unique pooled comparisons for pregnancy, of which 24 were not statistically significant. Six showed statistically significant changes in pregnancy rates: two with increased risk (RR 1.30, 95% CI 1.02-1.65; and RR 1.39, 95% CI 1.10-1.75) and four with decreased risk ranging from RR 0.56, 95% CI 0.41-0.77, to RR 0.75, 95% CI 0.58-0.96. All studies were at high risk of bias, and the quality of evidence was low or very low. Identified evidence indicated no consistent difference in rates of pregnancies between intervention recipients and controls. | |
| Schaafsma, Kok, Stoffelen & Curfs (2015) | English language, journal papers only, must relate to sex education, sexuality and intellectual disabilities, must contain methods useful to sex education for users with | Jan 1981 – Jan 2013 | To identify methods for sex education programs aimed at individuals with intellectual disabilities | “methods for increasing knowledge and for improving skills and attitudes were reported. However, the studies revealed that generalization of skills to real-life situations was often not achieved. There are indications that the maintenance of knowledge and skills still needs extra attention. Moreover, detailed descriptions of the program materials, program goals, and methods used in the programs were often lacking in the reports. Although there is some evidence for methods that may | |

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| | intellectual disabilities, must be a study to check effectiveness of a programme | | | improve knowledge, attitudes, and skills with regard to sex education aimed at individuals with intellectual disabilities, due to the lack of detailed descriptions provided it is unclear under which conditions these methods work.” | |
| Gonzalvez et al (2018) | Programme with sex education contents, participants must be people with intellectual disabilities; experimental group and a control group and pretest-posttest measurements; provide enough data to calculate the effect | 1988 - 2017 | Evaluate the degree of effectiveness of sex education programs for people with intellectual disabilities and determine which moderating variables are involved in this effectiveness. | Intervention groups more effective than control showing effectiveness. Gender separation did improve effectiveness but age did not impact effect size, longer sessions did not necessarily increase impact (40-45mins most effective, longer than that did not improve effect) | “sexual education programs for people with intellectual disabilities should consider as areas of intervention the recognition of inappropriate behaviors and decision-making in situations of abuse, since they are the components that have shown a greater effectiveness. Besides, groups should be formed by participants of only one sex and the duration of the sessions of the programs should not exceed 45 min in order to avoid the appearance of fatigue or inattention in the participants. Finally, the instructors should have a high degree of training and carry out a follow-up to evaluate the effectiveness of the program over time. Demonstrated” |
| Santelli et al (2005) | United states, reports or studies, must relate to Abstinence Only Education, does Include sources that have not been peer-reviewed. | Not clearly defined (July 2005 end point, but no clear start point for the material searched or included) | To review key issues related to understanding and evaluating abstinence-only (AOE) or abstinence-until-marriage policies. | Although abstinence from sex is theoretically protective against pregnancy and disease, in practice AO programs often fail to prevent these outcomes. Although federal support of abstinence-only programs has grown rapidly since 1996, existing evaluations of such programs either do not meet standards for scientific evaluation or lack evidence of efficacy in delaying initiation of sexual intercourse. | “Schools and health care providers should encourage abstinence as an important option for adolescents. “Abstinence-only” as a basis for health policy and programs should be abandoned.” |
| Petrova & Garcia-Retamero (2015) | United states, must relate to STI prevention, English language. | 1989 - 2012 | To provide evidence-based assessment of STI prevention education programmes | “Results showed that on average interventions reduced incidence roughly from 7 to 6 out of 100 people (17% relative risk reduction (RRR)). Interventions focused on abstinence had no effect, while comprehensive education programs aiming to improve skills and promote safe sexual | Recommendations for interventions to provide comprehensive information rather than abstinence only, and additional focus on the skills identified in the results including communication and negotiation skills. |

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| | | | | practices reduced risk by 4 percent (23% RRR). In particular, interventions teaching condom use skills or communication and negotiation skills reduced incidence of STIs by 3 to 4 percent (30% RRR). Finally, interventions decreasing frequency of intercourse or number of sexual partners and interventions increasing condom use also reduced incidence of STIs by 5 to 7 percent (28-36% RRR). Overall properly designed interventions with the above-mentioned characteristics can achieve a 30% reduction of STI incidence.” | |
| Santelli et al (2017) | United states, reports or studies, must realate to Abstinence Only Education, does Include sources that have not been peer-reviewed. | Additional literature added to the original review (2005) to cover the years between 2005 – 2016. | To review key issues related to understanding and evaluating abstinence-only (AOE) or abstinence-until-marriage policies. | Findings mirror those found in Santelli et al (2005) adding to them with additional evidence. | Conclusions and recommendations are the same as those generated from the 2005 report. |
| Kirby, Obasi & Laris (2006) | Unable to access full copy – selection criteria not available | Unable to access full copy – date range not available | To review the impact of sex education and HIV education interventions in schools in developing countries on both risk behaviours for HIV and the psychosocial factors that affect them. | The 22 interventions that met selection criteria “significantly improved 21 out of 55 sexual behaviours measured. Only one of the interventions (a non-curriculum-based peer-led intervention) increased any measure of reported sexual intercourse; 7 interventions delayed the reported onset of sex; 3 reduced the reported number of sexual partners; and 1 reduced the reported frequency of sexual activity. Furthermore, 16 of the 22 interventions significantly delayed sex, reduced the frequency of sex, decreased the number of sexual partners, increased the use of condoms or contraceptives or reduced the incidence of unprotected sex.” | “The curriculum-based interventions having the characteristics of effective interventions in the developed and developing world should be implemented more widely. All types of school-based interventions need additional rigorous evaluation, and more rigorous evaluations of peer-led and non-curriculum-based interventions are necessary before they can be widely recommended.” |

From 1995

| Peer-education reviews | | | | | |
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| Authors & Year | Types of paper included | Dates covered in review | Aims | Findings | Recommendations relating to this study |
| Siddiqui, Kataria, Waton & Chandra-Mouli (2020) | India only, Peer education only, involved young people aged 10–24; measurements on changes in knowledge, attitudes, or behaviour reported; English language | 1 January 2000 – 31 December 2016 | To provide insight into the knowledge, attitudinal, and behavioural outcomes affected by peer education, as well as the inputs, coverage, content, and context of such interventions in India. | While published literature on peer education in the Indian context is uneven in quality, there are clear indications that it has contributed to improvements in these areas in some—but not all—initiatives. The review of Indian peer-education initiatives did not directly address the optimal conditions for the success of peer education. The review found that the way in which peer education has been utilised varies greatly in terms of content, delivery, and context in India. There is no standardised model of peer education, and the majority of initiatives combine it with other interventions such as health service delivery, sports coaching or vocational training for young people. | “Another pertinent research question emerging from both India and global reviews is whether the fields of global health and human rights are measuring the “right” things in relation to peer education. To date, evaluations and research of peer education have judged its effectiveness primarily on changes in knowledge, attitudes, behaviours, and, in some cases, health outcomes. Whilst these measurements are not without value, it is important to further explore the potential of peer education to contribute to a range of desirable health and rights outcomes, including young people’s awareness of their rights to access information and services; legitimization of dialogue on previously-taboo SRH issues; young people’s awareness of where and how to seek help and their confidence in doing so; improvement in communication between peers, as well as between parents and young people; and enhancement of social networks.” |
| Maticka-Tyndale & Penwell Barnett (2010) | Youth targeted e.g, around 15–24), delivered in a geographical community, at least some content relevant to the prevention of HIV/AIDS, designed to be delivered primarily by youth peers, low- or middle- | 1994 - 2008 | To fill the gap in knowledge about ‘what works’ in low and middle income countries in relation to peer-education interventions in HIV/AIDS prevention | The results found that peer-led HIV/AIDS programs have demonstrated success in effecting positive change in knowledge and condom use and have demonstrated some success in changing community attitudes and norms. Effects on other sexual behaviors and STI rates were equivocal. | Recommended elements for successful peer education included: “a community needs assessment (unless current data are already available from another source), well-thought out PE selection (preferably with input from youth/community stakeholders), adequate PE training, PE monitoring/supervision, involvement of youth and community stakeholders in program development and implementation, a structure for program delivery, PE retention efforts, a system to |

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| | income country, provides evaluation of methods and results, the content and delivery methods were described, English or French language | | | | locate and train replacement PE, and a system for sustainability.” |
| Wong et al (2019) | English language, peer-reviewed, and specific peer-to-peer sexual health education among college students. | 2000 – April 2017 | to evaluate the effectiveness of peer education groups on reducing sexual health risks and increasing sexual health knowledge on a college campus. | Peer education was beneficial for increasing knowledge of sexual health topics and creating some behaviour change such as increased condom use and HIV testing. Additionally, interventions developed specifically for women were effective. Authors concluded that Peer education is an effective way to disseminate sexual health information and can be a reliable resource for college students. | By tailoring programs to be culturally relevant and gender specific, peer education groups can meet the needs of their audiences. More research is needed to determine how effective peer education is in changing risky behaviours in the long term. Additionally, research is needed to explore the connection between increased knowledge or intent to practice safer sex behaviours and the actual practice of safer sex behaviours after exposure to peer-led sexual health education. |
| Sun et al (2018) | English language, peer-reviewed, more developed countries. | 2005 - 2015 | To evaluate peer-led sexual health education interventions in more developed countries | “The majority of articles found improvements in sexual health knowledge (13 of 14) and attitudes (11 of 15) at postintervention stages. Two studies showed improved self-efficacy, and three showed behavioural changes. A preliminary synthesis of effectiveness and level of participation was done. Meta-analysis revealed a large effect on knowledge and a medium effect on attitude change” | this approach is effective in changing knowledge and attitudes but not behaviours. Further research and action are needed to understand optimal implementation. |
| Kim & Free (2008) | English language, RCTs or Quasi-RCTs, Peer-interventions related to sexual health, include 10-19 year olds, had an appropriate comparison group, provided preintervention and | 1998 - 2005 | To systematically review RCTs/quasi-RCTs of peer-led sex education interventions and evaluate if Harden et al’s (1999) recommendations for peer-led interventions have | “Despite promising results in some trials, overall findings do not provide convincing evidence that peer-led education improves sexual outcomes among adolescents.” | “Future trials should build on the successful trials conducted to date and should strive to fulfill existing quality criteria.” |

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| | postintervention data, and reported all outcomes | | been addressed in studies since 1998. | | |
| Harden et al (1999) | prospective controlled studies, with one or more control groups, that assessed outcome variables before and after the intervention, English language, 11-24 years, Wider health promotion (e.g. smoking, etc) including sexual health and HIV prevention | 1968 - 1998 | To determine the effectiveness of peer-delivered health promotion in promoting young people's health and to examine the characteristics of peer-delivered interventions which differentiate from teacher-delivered interventions. | “Although the review did find some evidence for the effectiveness of peer-delivered health promotion in producing positive changes in health behaviour, a clear picture of success is still to be determined. Much more work is needed to gain a clearer understanding of the different processes involved in peer-delivered health promotion and how these relate to the success or otherwise of these interventions. Most young people expressed positive views on peer-delivered health promotion. In terms of implementation issues, conflict between the philosophy of peer education and the school environment was identified as a barrier and such organisational contexts made working with young people challenging. In terms of training, a main problem identified was the importance of ongoing support for peer educators.” | A number of recommendations for developing and implementing health promotion for young people are presented in the report |
| He et al (2020) | Must relate to peer-education interventions on HIV high-risk groups, RCTs or quasiexperimental intervention studies or post-intervention studies or serial cross-sectional | January 2000 – April 2019 | To quantify the impact of peer education over time among high-risk HIV groups globally. | peer education was associated with 36% decreased rates of HIV infection among overall high risk groups. Peer education can promote HIV testing and condom use while reduce equipment sharing and unprotected sex. Time trend analysis revealed that peer education had a consistent effect on behaviour change for over 24 months and the different follow-up times were a source of heterogeneity. | Low and middle-income countries are encouraged to conduct large-scale peer education. |

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| | intervention studies with quantitative data, behavioral, psychological or social outcomes related to HIV health promotion | | | | |
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Any dates included

| Influencers and social media in RSE reviews | | | | | |
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| Authors & Year | Types of paper included | Dates covered in review | Aims | Findings | Recommendations relating to this study |
| Martin et al (2020) | participatory intervention, included the theme of sexual health, were conducted on the internet (website, social media, online gaming system), targeted populations aged between 10 and 24 years, and had design, implementation, and evaluation methods available. | From date not provided - Jan 2019 | To describe existing published studies on online participatory intervention methods used to promote the sexual health of adolescents and young adults | Most popular medium was websites (20/37), then online social networks (13/37), with Facebook dominating this group. Online peer interaction is the most common participatory component promoted by interventions, followed by interaction with a professional. Another participatory component is game-type activity. Videos were broadcast for more than half of the interventions. In total, 43% of the interventions were based on a theoretical model, with many using the Information-Motivation-Behavioral Skills model. Less than half of the interventions have been evaluated for effectiveness, while one-third reported plans to do so and one-fifth did not indicate any plan for effectiveness evaluation. Among the outcomes (evaluated or planned for evaluation), sexual behaviors are the most evaluated, followed by condom use and sexual health knowledge. | Participatory online interventions for young people's sexual health have shown their feasibility, practical interest, and attractiveness, but their effectiveness has not yet been sufficiently evaluated. Online peer interaction, the major participatory component, is not sufficiently conceptualized and defined as a determinant of change or theoretical model component. One potential development would be to build a conceptual model integrating online peer interaction and support as a component. |

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| Teadt et al (2020) | African American adolescents and young adult participants aged 13-24 years, sexual health, new media use,US publications, Study samples required to reflect the US African American population, English language. | 2009 - 2018 | The purpose of this scoping review was to address promising approaches in new media that may serve as valuable tools in health promotion, prevention, education, and intervention development aimed at African American AYA. | “While research in this area is limited, the results of this scoping review indicate that new media is a promising sexual health promotion tool for African American adolescents and young adults. A range of new media platforms was shown to be effective in reaching African American youth, improving sexual health–related attitudes and behaviors and filling gaps in sexual health–related knowledge and information.” | New media is a promising and feasible platform for improving the sexual health of African American AYA. Further research is suggested to better understand the benefits of new media as a sexual health promotion tool among this specific population. |
| Simon & Daneback (2013) | Primary or substantial focus on sex education, primary or substantial focus on the Internet or media associated with the Internet (such as mobile phones), English language ,13 to 19 years old | Information not available | To review data on adolescents’ use of the Internet for sex education | (a) adolescents report engaging with sex information online; (b) adolescents are interested in a number of topics, including sexually transmitted infections and pregnancy; (c) the quality of adolescent-targeted sex information online can be lacking, but adolescents can evaluate these sources; and (d) Internet-based interventions can increase adolescents’ sexual health knowledge. | With further research into adolescents’ online sex education and its social context, researchers, practitioners, educators, and parents will be able to gain a greater understanding of how online sex education could alter the sex education landscape going forward. |
| Widman et al (2018) | youth aged 13-24, utilized technology-based platforms, measured condom use or abstinence as outcomes, evaluated program effects with | Information not provided | To synthesise the literature on technology-based sexual health interventions among youth. | There was a significant weighted mean effect of technology-based interventions on condom use and abstinence Effects did not differ by age, gender, country, intervention dose, interactivity, or program tailoring. However, effects were stronger when assessed with short-term (1-5 months) than with longer term (greater than 6 months) follow-ups. | Future work should adapt interventions to extend their protective effects over time. |

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| | experimental or quasi-experimental designs, English language. | | | Compared with control programs, technology-based interventions were also more effective in increasing sexual health knowledge and safer sex norms & attitudes. | |
| Hadnut-Beumler, Po'e & Barkin | Social media as a main component of study methodology or content; public health topic; majority Hispanic/Latino study population; English or Spanish language; and original research study | 1/1/2010 – 31/12/2015 | To conduct a scoping systematic review of the published literature to capture the ways social media has been used in health interventions aimed at Hispanic populations and identify gaps in existing knowledge to provide recommendations for future research. | Social media offers a potential accessible venue for health interventions aimed at Hispanics, a group at disproportionate risk for poor health outcomes. To date, most publications are descriptive in nature, with few indicating specific interventions and associated outcomes to improve health. | |
| Jones et al (2014) | adolescent or young adult study population, (a mean or median age less than 25 years), test of an intervention (with or without a control group), intervention delivered via social media or text messages, and STD-related outcomes, English language, peer-reviewed, original research. | Information not available | To examine the effectiveness of social media and text messaging interventions designed to increase sexually transmitted disease (STD) knowledge, increase screening/testing, decrease risky sexual behaviours, and reduce the incidence of STDs among young adults aged 15 through 24 years | These studies provide preliminary evidence indicating that social media and text messaging can increase knowledge regarding the prevention of STDs. These interventions may also affect behavior, such as screening/testing for STDs, sexual risk behaviors, and STD acquisition, but the evidence for effect is weak. | Many of these studies had several limitations that future research should address, including a reliance on self-reported data, small sample sizes, poor retention, low generalizability, and low analytic rigor. Additional research is needed to determine the most effective and engaging approaches for young men and women. |
| Wadham et al (2019) | At least 50% of sample were aged | January 2010 – April 2017 | to assess the effectiveness of | 25 studies met inclusion criteria. The majority (16/25) used web-based | Although new media has the capacity to expand efficiencies and coverage, the |

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| | 13–24 years evaluation of the effect of an intervention on sexual health knowledge, attitudes and/or behaviours. In addition, papers that evaluated the feasibility, useability and acceptability of new digital media interventions on sexual health were included. full text, peer reviewed, English language. | | sexual health interventions delivered via new digital media to young people (aged 13-24 years). | platforms to deliver their intervention. A large proportion of studies (11/25) specifically focused on HIV prevention. Seven studies found a statistically significant effect of the intervention on knowledge levels regarding the prevention HIV and other STI, as well as general sexual health knowledge, but only one-fifth of interventions evaluating intentions to use condoms reported significant effects due to the intervention. Nine studies focused on individuals from an African American background. | technology itself does not guarantee success. It is essential that interventions using new digital media have high-quality, evidence-based content that engages with individual participants. |
| Guse et al (2012) | Peer-reviewed, aged 13–24 years comprised at least 50% of the study sample, or analyses stratified to present results specific to this age range, empirical evaluation of impact | January 2000 and May 2011 | More data from controlled studies with longer (>1 year) follow-up and measurement of behavioral outcomes will provide a more robust evidence base from which to judge the effectiveness of new digital media in <u>changing adolescent sexual behavior</u> . | Seven studies were conducted in the United States. Eight described Web-based interventions, one used mobile phones, and one was conducted on an SNS. Two studies significantly delayed initiation of sex, and one was successful in encouraging users of an SNS to remove sex references from their public profile. Seven interventions significantly influenced psychosocial outcomes such as condom self-efficacy and abstinence attitudes, but at times the results were in directions unexpected by the study authors. Six studies increased knowledge of HIV, sexually transmitted infections, or pregnancy. | To summarize the currently published evidence base on the effectiveness of new digital media-based sexual health interventions for adolescents aged 13–24 years. |

Appendix C – Ethical Approval

Below are copies of the original ethical approval and two additional ethics amendments made for this research with the University of Salford ethics board.



Research, Enterprise and Engagement
Ethical Approval Panel

Doctoral & Research Support
Research and Knowledge Exchange,
Room B27, Maxwell Building,
University of Salford,
Manchester
M5 4WT

T +44(0)161 295 2280

www.salford.ac.uk

26 March 2020

Dear Lisa,

RE: ETHICS APPLICATION – HSR1920-057 – Oh the shame of 'it': Social Media and peer-education in British Sex and Relationship Education.

Based on the information that you have provided, I am pleased to inform you that application HSR1920-057 has been approved.

If there are any changes to the project and/or its methodology, then please inform the Panel as soon as possible by contacting Health-ResearchEthics@salford.ac.uk

Yours sincerely,

A handwritten signature in black ink, appearing to read 'A Clark', written over a light grey rectangular background.

Professor Andrew Clark
Chair of the Research Ethics Panel

Amendment Notification Form

| | | |
|---|---|-----------------------------------|
| Title of Project: | | |
| Oh the shame of 'it': Social Media and peer-education in British Sex and Relationship Education. | | |
| Name of Lead Applicant: | School: School of Health and Society | |
| Lisa Garwood-Cross | Health & Society | |
| Are you the original Principal Investigator (PI) for this study? | | Yes |
| <i>If you have selected 'NO', please explain why you are applying for the amendment:</i> | | |
| Date original approval obtained: | Reference No: | Externally funded project? |
| 26/03/2020 | HSR1920-057 | No |
| <p>Please outline the proposed changes to the project. NB. If the changes require any amendments to the PIS, Consent Form(s) or recruitment material, then please submit these with this form highlighting where the changes have been made:</p> | | |
| <p>The questions for the young people's survey (13 – 18 year olds) and the email interview for influencers have been finalised. These research instruments have been significantly revised since the original application. The survey will be piloted (see highlighted section in the original application for further details). Attached are 3 documents relating to the research instrument development– Appendix B and Appendix E contain the questions as they appear with any explanatory text, and Appendix K which demonstrates the development of questions, where questions are derived from validated surveys and when no validated questions were available related to this topic the purpose for inclusion has been noted.</p> <p>In addition Appendix L contains the information sheet and consent form for the pilot study, and Appendix M contains the pilot feedback sheet.</p> | | |
| <p>Please say whether the proposed changes present any new ethical issues or changes to ethical issues that were identified in the original ethics review, and provide details of how these will be addressed:</p> | | |
| <p>No new ethical issues are proposed by these changes, questions for the young people's questionnaire will be piloted with a small group of young people to ensure that they have no concerns about the content or phrasing of the questions (see highlighted section of ethics application for more details).</p> | | |

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| Amendment Approved: | <input type="checkbox"/> YES <input checked="" type="checkbox"/> | Date of Approval: | 09/03/2021 |
|----------------------------|--|--------------------------|------------|

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|--|
| Chair's Signature:  |
|--|

Once completed you should submit this form and any additional documentation to the RKE Ethics Team at ethics@salford.ac.uk

Amendment Notification Form

| | | |
|---|----------------------|-----------------------------------|
| Title of Project: | | |
| Oh the shame of 'it': Social Media and peer-education in British Sex and Relationship Education. | | |
| Name of Lead Applicant: | School: | |
| Lisa Garwood-Cross | Health & Society | |
| Are you the original Principal Investigator (PI) for this study? | | Yes |
| <i>If you have selected 'NO', please explain why you are applying for the amendment:</i> | | |
| Date original approval obtained: | Reference No: | Externally funded project? |
| 26/03/2020 | HSR1920-057 | No |
| <p>Please outline the proposed changes to the project. NB. If the changes require any amendments to the PIS, Consent Form(s) or recruitment material, then please submit these with this form highlighting where the changes have been made:</p> <p>Minor addition of a video to be shared on YouTube for survey recruitment that will link to the survey in the bio of the YouTube video (text in bio will be the existing text approved from Appendix F, which has already been approved by the ethics panel – but has been attached to this amendment form for reference).</p> <p>The video can be found at the following wetransfer link: https://we.tl/t-c9tNrCJL8U</p> <p>Please say whether the proposed changes present any new ethical issues or changes to ethical issues that were identified in the original ethics review, and provide details of how these will be addressed:</p> <p>No new ethical issues are proposed by these changes, the video content is based on previously approved recruitment materials, but presented in an audio-visual format.</p> | | |

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| Amendment Approved: | <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes | Date of Approval: | 29/04/2021 |
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| <p>Chair's Signature:</p>  |
|--|

Once completed you should submit this form and any additional documentation to the RKE Ethics Team at ethics@salford.ac.uk

Appendix D - Survey question development

| Question | Validated from | Changes from original validated question/s | Purpose for inclusion if not validated |
|--|--|--|--|
| Section one: Social media and Influencers | | | |
| <p>Which of these devices do you have, or have access to at home? [Select all that apply] A mobile phone that is not a smartphone b. A smartphone c. A desktop computer d. A laptop or notebook computer e. A tablet f. A games console g. I have none of these</p> | Adapted from Teens, Social media and technology questionnaire 2018 (Pew Research Centre) and Global Kids Online Questionnaire. | A combination of questions from both validated surveys were merged together the question from TSM&T but with a merging of answers including those from Global Kids Online to provide more detailed options. | |
| <p>Which of these devices do you have access to the internet on? [Select all that apply] a. A smartphone b. A desktop computer c. A laptop or notebook computer d. A tablet e. A games console f. School laptop g. School computer h. I don't have access to the internet</p> | Adapted from Teens, Social media and technology questionnaire 2018 (Pew Research Centre) and Global Kids Online Questionnaire. | As above – also, Global Kids Online questionnaire also asked for frequency of use for each device, however this information is not essential to this research so has been excluded from this question. School laptop and computer removed as options for 19 – 24-year-olds survey | |
| <p>Do you ever use any of the following social media sites? [Select all that apply] a. Twitter b. Instagram c. Facebook d. YouTube e. Snapchat f. Tumblr g. Reddit h. TikTok I. None of these</p> | Teens, Social media and technology questionnaire 2018 (Pew Research Centre). | Added TikTok as an answer because this social media site was not in existence when the 2018 survey was created. | |

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| <p>Which of these devices do you use to access social media on the most? [Select one]</p> <p>a. A smartphone b. A desktop computer c. A laptop or notebook computer d. A tablet e. A games console f. School laptop g. School computer h. I don't use social media.</p> | | <p>School computer and laptop removed as options for 19 – 24-year-olds</p> | <p>As the YouTube platform (and other social media platforms) is available as both an app and a webpage, it is valuable to know which ways young people are accessing their social media content as this effects the user experience they have.</p> |
| <p>*Do you follow any people on social media who could be considered influencers? [select one]</p> <p>a. Yes, many b. Yes, some c. No</p> | <p>THE INFLUENCER REPORT: Engaging Gen Z and Millennials.</p> | | |
| <p><i>If the participant answered a. or b. to the starred question above they will be asked the following 2 questions:</i></p> <p>Why do you like to follow influencers?</p> | <p>THE INFLUENCER REPORT: Engaging Gen Z and Millennials.</p> | | |
| <p>Do you trust the influencers you follow?</p> <p>a. Yes b. No c. Some, but not all</p> | | | <p>This research aims to understand if influencers can take on a trust relationship with audiences, much like a peer trust relationship. However young people may not trust influencers, feeling they are inauthentic, out to sell products or disconnected from their audience. Understanding how young people perceive social media influencers is important to understand to what extent a trust relationship is possible.</p> |
| <p><i>If the participant answered c. to the starred question above they will be asked the following 2 questions.</i></p> <p>Why do you not like to follow influencers?</p> | <p>THE INFLUENCER REPORT: Engaging Gen Z and Millennials.</p> | <p>Inversion of the question for those who do not follow influencers</p> | |

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| <p>Do you trust influencers? a. Yes b. No c. Some, but not all d. I don't know of any influencers</p> | | | <p>This research aims to understand if influencers can take on a trust relationship with audiences, much like a peer trust relationship. However young people may not trust influencers, feeling they are inauthentic, out to sell products or disconnected from their audience. Understanding how young people perceive social media influencers is important to understand to what extent a trust relationship is possible.</p> |
| <p>What do you think makes an influencer trustworthy or untrustworthy?</p> | | | <p>Contributes to research O2) 'To identify how social media influencers fit within a spectrum of health influence.' by identifying what markers of trust in influencers in general.</p> |
| <p>Do you watch videos made by YouTube influencers? <i>(YouTube influencers are also sometimes know as 'vloggers' or 'YouTubers')</i> a. Yes b. No</p> | | | <p>Establishes not only YouTube use but if YouTube influencers are viewed by participants.</p> |
| <p>Have you ever felt influenced to buy something because an influencer shared it or recommended it? a. Yes b. No</p> | | | <p>One of the concerns this research is considering is if the relationship influencers have with marketing is problematic for their use in education. This question gathers data to understand the scale with which this might need to be considered.</p> |
| <p>If you see a social media video or post about something you think a friend will find useful, would you send it to them? a. Yes b. No c. Depends on the content</p> | | | <p>This question is a precursor to a question later in the questionnaire about sharing RSE related content. The inclusion of this question provides opportunity to see if young people are sharing social media content at all, verses sharing social media content about RSE (e.g. They may not share RSE content because they don't share content at all, or they may share content but be</p> |

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| | | | embarrassed to share RSE content.) |
| <p>Which ways have you sent useful social media content to friends in the past?</p> <p>a. Facebook wall b. Facebook messenger</p> <p>c. snapchat message</p> <p>d. Instagram private message</p> <p>e. Tweet it to them (on twitter)</p> <p>f. Twitter private message</p> <p>g. text/whatsapp</p> <p>h. other [insert answer]</p> <p>i. I don't share social media content with my friends</p> | | | Contributes further understanding to how young people are sharing content, as part of the preliminary insights towards research objectives 5 and 6. |
| <p>Are you concerned about social media platforms having your data and why?</p> <p>(Data includes your personal details such as name, email, date of birth, and also details about your online activity and what you engage in)</p> | | | Contributes to research objective 1 'To understand the opportunities and limitations of the YouTube platform for RSE.' by understanding how aware young people are about their data privacy when using social media platforms. |
| Section two: Imagined scenarios | | | |
| <p>A friend tells you that they are having trouble in their relationship. Their partner wants them to have sex but they do not feel ready. They don't know how to say no to their partner without upsetting them. Your friend asks you for advice, what do you do?</p> | | <p>Adaption for 19 - 24-year-olds:</p> <p>A friend tells you that they are having trouble in their relationship. Their partner often pressures them into sex when they don't feel like it. They don't know how to say no to their partner without upsetting them. Your friend asks you for advice, what do you do?</p> | <p>The purpose of these vignette questions is to identify the processes a young person might go through in social situations regarding access to sexual health information. Do they ask a parent or teacher for advice, do they do a google search, etc.?</p> <p>This question fits in with topics taught in the secondary RSE curriculum regarding communication of consent and the choice to delay sexual activity therefore should be age appropriate for all young people taking part in the study.</p> <p>(See https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/908013/Relationships)</p> |

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| | | | ps_Education_Relationships_and_Sex_Education_RSE_and_Health_Education.pdf - page 29). |
| Your friend has told you they think there might be something wrong with them because they don't feel attraction or crushes towards anyone like their friends do. Whilst scrolling YouTube you come across a video of someone talking about exactly what your friend told you. What do you do? | | Adaption for 19 – 24-year-olds: Your friend has told you they think there might be something wrong with them because they don't feel sexual attraction. Whilst scrolling YouTube you come across a video of someone talking about exactly what your friend told you. What do you do? | The theme topic of attraction and comparisons with friends for this question is based on topics (that deal with attraction, puberty, pregnancy, etc.) from the Global Early Adolescent Study which was aimed at 10 – 14 year olds. Therefore has been deemed age-appropriate for the 13 – 18 year olds in this study. However the question phrasing and focus on YouTube and is not based on a previously validated survey. It seeks to understand what young people would do upon discovering information that may be useful to their friends in a situation around relationship concerns. |
| Section three: sexual health information needs and online/social media | | | |
| If you have questions about sex, relationships or sexual health where would you be most likely to go for answers? | | | Addresses objectives 5 and 6 |
| Which of these people would you tell if you were worried about something to do with sex or relationships? [Select all that apply] a. Parents b. Friends c. Teachers d. I wouldn't tell any of these people | | Adaption for 19 – 24-year-olds: Who would you talk to if you were worried about something to do with sex, relationships or sexual health? Open-ended question. | Addresses objectives 5 and 6 |
| Do school lessons and parents/carers give you all the information you want to know about sex and relationships? a. Yes b. No c. Other [insert answer] | | Adaption for 19 – 24-year-olds: adapted to past tense | Addresses objectives 5 and 6 |
| Have you ever used the internet to find out | | | Addresses objectives 5 and 6 |

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| <p>information or answer questions about sex, relationships or sexual health? a. Yes b. No</p> | | | |
| <p>What do you think are the <u>benefits</u> of using the internet to find out information or answer questions about sex, relationships or sexual health?</p> | | | Addresses objectives 5 and 6 |
| <p>What do you think are the <u>problems</u> with using the internet to find out information or answer questions about sex, relationships or sexual health?</p> | | | Addresses objectives 5 and 6 |
| <p>If you were looking for sex, relationship and sexual health information <u>online</u>, where would you look?</p> | | | Addresses objectives 5 and 6 |
| <p>Have you ever watched a YouTube video on sex and relationships to get advice? a. Yes b. No</p> | | | Addresses objectives 5 and 6 Also establishes if YouTube is on young people's radar as a location for RSE information. |
| <p>Do you follow or watch videos by any influencers who post about sex, relationships or sexual health? a. Yes b. No</p> | | | This question furthers the question about following influencers in section one. Young people may follow influencers on other topics but not Sex edutainment influencers. |
| <p>If you answered yes to the last question, please name any influencers you can think of that you follow or enjoy content from who post about sex, relationships or sexual health, and what social media platforms you follow them on</p> | | | Some influencers post on a variety of topics (including sex, relationships and sexual health) whereas others specialise in that topic alone. This question aims to see the content young people are choosing to view. |
| <p>What benefits do you think there are to using YouTube as a social media platform for accessing advice and</p> | | | Contributes to objective 1 |

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| information about sex and relationships? | | | |
| What concerns do you have about using YouTube to access Sex and Relationships advice and information? | | | Contributes to objective 1 from the viewpoint of young people themselves. |
| If you found a social media post/video about a sex or relationship issue that you knew a friend was having, would you share it with them? If so, how would you share it? | | | <p>This question is designed to understand if the content of RSE videos makes young people less likely to share them. This contrasts the generic question in section one about sharing content.</p> <p>This question follows on from the question in section 1 on sharing content but specifies it in relation to sex and relationships content to see if this affects the answers. The choice to include how they send it allows for nuance in whether public/private methods of sharing are used.</p> |
| If you found a social media post/video about a sex or relationship issue that you knew a friend was having, would you talk to them about the information the video contained/use it to pass on advice? a. Yes b. No | | | This variation to the question above is included to consider an alternative way information may pass between peers – through word of mouth rather than direct use of social media sharing features. |
| Did Covid-19 school closures affect your school Relationships and Sex Education (RSE or Sex Education) lessons? a. Yes b. No c. Don't know | | Question removed for 19 – 24-year-olds | In 2020 and 2021 the spread of Covid-19 forced school closures and home learning in the UK. This question seeks to understand if this affected the teaching of RSE, as this research studies RSE resources that can be used remotely. |
| Did you use more online resources to learn about topics related to Sex and Relationships Education this year due to Covid-19? a. Yes | | Question removed for 19 – 24-year-olds | This question seeks to understand if there has been a greater uptake in young people using online resources in the wake of Covid-19. |

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| b. No c. Don't know | | | |
| How could your relationships and sex education have been improved? | Sex Education Forum Young People's RSE poll 2018 | The original validated question had a selection of answers as well as the option for young people to write their own answers. For this study the pre-written answers will not be included to encourage answers in participants own voice. | |
| Section four: Demographics | | | |
| How old are you? a.13 b.14 c.15 d.16 e.17 f.18 | | Variation for 19 – 24 year olds has the adapted ages | Answers may differ depending on the age of the young person, collecting this data allows differences in age to be considered in recommendations from this research. |
| This question is about your gender identity. Do you identify as: a.woman/girl b. man/boy c.transwoman/transgirl d.transman/transboy e. non-binary/genderqueer/agen der/gender fluid f. don't know g. prefer not to say h. other | National LGBT survey (2017). | | The choice to use this question over a traditional 'what is your sex' question is that it follows more current understandings of inclusivity of gender identity. |
| Which of the following options best describes how you think of yourself? a. Heterosexual or Straight b. Gay or Lesbian c. Bisexual d. Other (insert answer) e. Prefer not to say | Health survey for England (2014). | | |
| What is your ethnic group? White | UK Census 2011. | | |

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| <p>a. English/Welsh/Scottish /Northern Irish/British b. Irish c. Gypsy or Irish Traveller d. Any other White background (Write in ethnic group)</p> <p><u>Mixed/multiple ethnic groups</u> e. White and Black Caribbean f. White and Black African g. White and Asian h. Any other Mixed/multiple ethnic background (Write in ethnic group)</p> <p><u>Asian/Asian British</u> i. Indian j. Pakistani k. Bangladeshi l. Chinese m. Any other Asian background (Write in ethnic group)</p> <p><u>Black/African/Caribbean/Black British</u> n. African o. Caribbean p. Any other Black/African/Caribbean background (Write in ethnic group)</p> <p><u>Other ethnic group</u> q. Arab r. Any other ethnic group (Write in ethnic group)</p> | | | |
| <p>What is your religion? a. No religion b. Christian (including Church of England, Catholic, Protestant and all other Christian denominations) c. Buddhist d. Hindu e. Jewish f. Muslim</p> | <p>UK Census 2011.</p> | | |

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| g. Sikh h. Any other religion (Write in religion) | | | |
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Sources:

Teens, Social media and technology questionnaire 2018 (Pew Research Centre) - <https://www.pewresearch.org/internet/2018/05/31/teens-social-media-technology-2018/>

Global Kids Online Questionnaire (2016) - <http://globalkidsonline.net/wp-content/uploads/2016/04/GKO-questionnaire-27-Oct-2016.pdf>

THE INFLUENCER REPORT: Engaging Gen Z and Millennials – <https://morningconsult.com/wp-content/uploads/2019/11/The-Influencer-Report-Engaging-Gen-Z-and-Millennials.pdf>

Global Early Adolescent Survey – <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6597075/>

Health Survey for England (2014) – <https://digital.nhs.uk/data-and-information/publications/statistical/health-survey-for-england/health-survey-for-england-2014>

Sex Education Forum Young People’s RSE poll (2018) – <https://www.sexeducationforum.org.uk/sites/default/files/field/attachment/Young%20people%27s%20RSE%20poll%202018.pdf>

UK Census (2011) – <https://www.ons.gov.uk/census/censustransformationprogramme/questiondevelopment/nationalidentityethnicgrouplanguageandreligionquestiondevelopmentforcensus2021>

National LGBT survey (2017) - <https://equalities.blog.gov.uk/2017/07/28/lgbtsurvey-asking-about-your-sex-and-gender-identity/>

Appendix E - 13 – 18-year-old information sheet, consent form and survey instrument

For the online survey, when respondents clicked the link to the survey they were presented with the information sheet on the first page, the consent form on the second page and the survey began from page three. This appendix provides all three as presented to the respondents.

Page 1: Information sheet

Information sheet for questionnaire participants Social media and Sex and Relationship Education Study

Thank you for your interest in taking part in this study on social media and Sex and Relationship Education. This sheet lays out some information about the project to help you decide if you would like to take part.

What is this research about?

This study aims to find out what young people want to learn about in Sex and Relationship Education and how they prefer it be delivered. The study is looking to see if social media like YouTube, Instagram or other platforms would be useful to young people as an additional or alternative way to classroom learning. Finally the study aims to understand if you trust social media, YouTubers and other influencers to give you accurate information about sex and relationships.

Why have I been invited to take part?

You have been invited to take part in the study because you are between the age of 13 – 18 and you live in the United Kingdom. We want the perspectives of young people from a range of cultural, religious and racial backgrounds, regardless of your gender, sexuality, or if you have any other protected characteristic, to make sure that all views are represented and no matter what your views are they are important.

What happens if I do take part?

If you choose to take part in this study you will complete a survey on the next screen which will take you roughly 10 minutes. The questions will give you a chance to share your opinions on Sex and Relationship Education, where you go to get information and how/what you would like to be taught about the topic. You will also be asked to give your opinions on social media, YouTube and influencers. There will be no follow up and so taking part should only take around 10 minutes of your time.

Do I need my parent(s)/guardian(s) permission to take part?

No, if you would prefer not to discuss this research with your parents/guardians then you do not need their permission to take part, however we would encourage you to show them this information sheet if you feel comfortable doing so, especially if you are unsure or would like their advice. We can also give them a special sheet for parent(s)/guardian(s) too which may answer questions they have about this study.

Do I have to take part?

It is up to you to decide. We will describe the study and go through the information sheet which we will give to you. We will then ask you to complete a consent form to show that you have agreed to take part. You are free to withdraw at any time, without giving a reason – simply close the survey if you change your mind.

What are the benefits of taking part?

Although there are no direct benefits to you in taking part, by sharing your opinions as part of the research you will be helping research into how Sex and Relationships Education can be modernised,

improved and made to serve you better.

What are the possible disadvantages and risks of taking part?

There should not be any disadvantages or risks from you taking part but the research is related to sex education, which may be a sensitive topic for you. You will be provided with links to support and advice services in case you do find the subject matter ever upsets you.

Are there any expenses and payments?

No, it will not cost you anything to take part and your participation can be done entirely online.

What if I change my mind?

If you change your mind about participating in the research after you have completed the survey it will not be possible to remove your responses due to the anonymous nature of the information. However if you change your mind during the survey you can close the survey window at any time, only the information already submitted will be used. If you have any concerns or questions at all about your participation either before or after completing the survey Contact Lisa Garwood-Cross at l.garwood-cross@edu.salford.ac.uk

What if there is a problem?

If you have a concern about any aspect of this study, you should ask to speak to the researcher Lisa Garwood-Cross at l.garwood-cross@edu.salford.ac.uk who will do their best to answer your questions. If you remain unhappy and wish to complain formally you can do this by contacting the Research Supervisor Anna Cooper-Ryan at a.m.cooper-ryan@salford.ac.uk . If the matter is still not resolved, please forward your concerns to Professor Andrew Clark, Chair of the Health Research Ethical Approval Panel, Room L521, Allerton Building, Frederick Road Campus, University of Salford, Salford, M6 6PU. Tel: 0161 295 4109. E: a.clark@salford.ac.uk

Will my taking part in the study be kept confidential?

Yes, no one will need to know that you have taken part. **You are encouraged not to put your name or personal details anywhere on this survey.** All the data will be held on a secure server and no one will be able to identify you from the results of the research. However, if there are situations where your answers suggest that you or someone else may come to harm or that future criminal activity may be committed then the researcher may need to report these to a Designated Safeguarding Officer at the University of Salford.

What will happen to the results of the study?

The results of the study will be shared publicly via academic journal publications, conferences and in the PhD thesis of Lisa Garwood-Cross. You will not be identifiable in anything published or publicly shared relating to the research, your participation will be anonymous. If you would like to know about the findings of the research please email Lisa Garwood-Cross at l.garwood-cross@edu.salford.ac.uk and when the research is complete you will be provided with a post-research findings sheet once the research is completed so you can see how your contribution has helped to shape the outcome.

How long will the information I give be kept?

All the anonymous data collected for this research will be kept until 31st December 2024.

Page 2: Consent form

Please complete and date this form **after** you have read and understood the study information sheet on the prior page. Read the following statements and select 'Yes' or 'No'.

- | | | |
|---|------------------------------|-----------------------------|
| 1. I confirm that I have read the information sheet for this study on the previous page. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 2. I understand that my participation is voluntary and that I am free to contact the researcher at any time to withdraw without giving any reason | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 3. If I do decide to withdraw I understand that the information I have given, up to the point of withdrawal, will be used in the research. The timeframe for withdrawal is | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 4. I understand that my personal details will be kept confidential and will not be revealed to people outside the research team. I will not be identifiable and my participation is completely anonymous; my parents, teachers and educators will not be able to know I participated or what my answers were. | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 5. I agree to participate by completing the digital survey | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 6. I understand that my anonymised data will be used in the researcher's thesis, other academic publications, conferences/presentations, and further research. | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 7. I agree to take part in the study. | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

If you have selected 'No' to any of these boxes please close this webpage window now and thank you for your consideration.

If you selected 'Yes' to all these boxes please enter the date in the box below and click next to begin the survey.

[DATE BOX]

Page 3: Social Media and Influencers

Some of the questions in this survey will relate to relationships and Sex Education, you will be warned in advance of these questions and can skip any questions that make you uncomfortable.

This section of the survey will ask about your social media habits and what your feelings are on influencers.

Which of these devices do you have, or have access to at home? [Select all that apply]

- A mobile phone that is not a smartphone
- b. A smartphone
- c. A desktop computer
- d. A laptop or notebook computer
- e. A tablet
- f. A games console
- g. I have none of these

Which of these devices do you have access to the internet on? [Select all that apply]

- a. A smartphone
- b. A desktop computer
- c. A laptop or notebook computer
- d. A tablet

- e. A games console
- f. School laptop
- g. School computer
- h. I don't have access to the internet

Do you ever use any of the following social media sites? [Select all that apply]

- a. Twitter
- b. Instagram
- c. Facebook
- d. YouTube
- e. Snapchat
- f. Tumblr
- g. Reddit
- h. TikTok
- i. None of these

Which of these devices do you use to access social media on the most? [Select one]

- a. A smartphone
- b. A desktop computer
- c. A laptop or notebook computer
- d. A tablet
- e. A games console
- f. School laptop
- g. School computer
- h. I don't use social media.

Do you follow any people on social media who could be considered influencers? [select one]

For the purpose of this question an 'influencer' is a person who creates public content on social media with a large following (for example, over 40,000 followers) that you do not personally know.

- a. Yes, many
- b. Yes, some
- c. No

[If a or b is selected]

Why do you like to follow influencers?

[long form answer box]

Do you trust the influencers you follow?

- a. Yes
- b. No
- c. Some, but not all

[If c is selected]

Why do you not like to follow influencers?

[long form answer box]

Do you trust influencers?

- a. Yes
- b. No
- c. Some, but not all
- d. I don't know of any influencers

What do you think makes an influencer trustworthy or untrustworthy?

[long form question box]

Have you ever felt influenced to buy something because an influencer shared it or recommended it?

For example, have you ever purchased an item or really wanted it because you saw a social media

influencer wearing it, using it or talking about it?

- a. Yes
- b. No

Do you watch videos made by YouTube influencers?

(YouTube influencers are also sometimes know as 'vloggers' or 'YouTubers')

- a. Yes
- b. No

If you see a social media video or post about something you think a friend will find useful, would you send it to them?

- a. Yes
- b. No
- c. Depends on the content

Which ways have you shared useful social media content to friends in the past?

- a. Facebook wall
- b. Facebook messenger
- c. snapchat message
- d. Instagram private message
- e. Tweet it to them (on twitter)
- f. Twitter private message
- g. text/whatsapp
- h. other [insert answer]
- i. I don't share social media content with my friends

Are you concerned about social media platforms having your data and why?

Data includes your personal details such as name, email, date of birth, and details about your online activity and what you engage in

[Long form answer box]

Page 4: Imagined scenarios

For the following questions imagine the scenario described and write what you would do. There are no wrong or right answers, we would just like to know how you might approach the situation.

If you find any of the questions in this section related to relationships and sex uncomfortable or upsetting you can skip the question and do not have to answer.

A friend tells you that they are having trouble in their relationship. Their partner wants them to have sex but they do not feel ready. They don't know how to say no to their partner without upsetting them. Your friend asks you for advice, what do you do?

[long form answer box]

Your friend has told you they think there might be something wrong with them because they don't feel attraction or crushes towards anyone like their friends do. Whilst scrolling YouTube you come across a video of someone talking about exactly what your friend told you. What do you do?

[Long form answer box]

Page 5: sexual health information needs and online/social media

The questions in this section will ask you about your opinions on accessing and sharing information about relationships and sexual health.

If you find any of the questions in this section related to relationships and sex uncomfortable or upsetting you can skip the question and do not have to answer.

If you have questions about sex, relationships or sexual health where would you be most likely to look for answers?

[long form answer box]

Which of these people would you tell if you were worried about something to do with sex or relationships? [Select all that apply]

- a. Parents
- b. Friends
- c. Teachers
- d. A counselor
- e. School pastoral support
- f. Other
- g. I wouldn't tell any of these people

Do school lessons and parents/carers give you all the information you want to know about sex and relationships?

- a. Yes
- b. No
- c. Other [insert answer]

Have you ever used the internet to find out information or answer questions about sex, relationships or sexual health?

- a. Yes
- b. No

What do you think are the benefits of using the internet to find out information or answer questions about sex, relationships or sexual health?

[long form answer box]

What do you think are the problems with using the internet to find out information or answer questions about sex, relationships or sexual health?

[long form answer box]

If you were looking for sex, relationship and sexual health information online, where would you look?

[long form answer box]

Have you ever watched a YouTube video on sex and relationships to get advice?

- a. Yes
- b. No

Do you follow or watch videos by any influencers who post about sex, relationships or sexual health?

- a. Yes
- b. No

If you answered yes to the last question, please name any influencers you can think of that you follow or enjoy content from who post about sex, relationships or sexual health, and what social media platforms you follow them on

[long form answer box]

What benefits do you think there are to using YouTube as a social media platform for accessing advice and information about sex and relationships?

[long form answer box]

What concerns do you have about using YouTube to access Sex and Relationships advice and information?

[long form answer box]

If you found a social media post/video about a sex or relationship issue that you knew a friend was having, would you share it with them? If so, how would you share it?

[long form answer box]

If you found a social media post/video about a sex or relationship issue that you knew a friend was having, would you talk to them about the information the video contained/use it to pass on advice?

- a. Yes
- b. No

Did Covid-19 school closures affect your school Relationships and Sex Education (RSE or Sex Education) lessons?

- a. Yes
- b. No
- c. Don't know

Did you use more online resources to learn about topics related to Sex and Relationships Education this year due to Covid-19?

- a. Yes
- b. No
- c. Don't know

How could your relationships and sex education have been improved?

[Long form answer box]

Page 6: Demographics

Finally, please answer five quick questions about you and how you identify. You will remain completely anonymous. If answering these questions makes you uncomfortable you can skip to the final page of the survey which will give you information about where you can go if you need further help related to any of the issues raised in this survey.

How old are you?

- a.13
- b.14
- c.15
- d.16
- e.17
- f.18

This question is about your gender identity. Do you identify as

- a.woman/girl
- b. Man/boy
- c.transwoman/transgirl
- d. transman/transboy
- e. non-binary/genderqueer/agender/gender fluid
- f. don't know
- g. prefer not to say
- h. other

Which of the following options best describes how you think of yourself?

- a. Heterosexual or Straight
- b. Gay or Lesbian
- c. Bisexual
- d. Other (insert answer)
- e. Prefer not to say

What is your ethnic group?White

- a. English/Welsh/Scottish/Northern Irish/British
- b. Irish
- c. Gypsy or Irish Traveller
- d. Any other White background

Mixed/multiple ethnic groups

- e. White and Black Caribbean
- f. White and Black African
- g. White and Asian
- h. Any other Mixed/multiple ethnic background

Asian/Asian British

- i. Indian
- j. Pakistani
- k. Bangladeshi
- l. Chinese
- m. Any other Asian background

Black/African/Caribbean/Black British

- n. African
- o. Caribbean
- p. Any other Black/African/Caribbean background
(Write in ethnic group)

Other ethnic group

- q. Arab
- r. Any other ethnic group

What is your religion?

- a. No religion
- b. Christian (including Church of England, Catholic, Protestant and all other Christian denominations)
- c. Buddhist
- d. Hindu
- e. Jewish
- f. Muslim
- g. Sikh
- h. Any other religion

Page 7: Final page

Thank you for taking part in this study, your opinions and experiences are valuable to the outcome of this research.

If you have found taking part in this research in any way distressing or it has raised unanswered questions for you about sex and relationships, then you can find answers and support at: <https://www.brook.org.uk/help-advice/>

If you need to talk to someone about any of the topics raised during this study or are feeling distressed, you can call:

- The Samaritans on 116 123

- The Mix on 0808 808 4994 or use their text service: <https://www.themix.org.uk/get-support/speak-to-our-team/crisis-messenger>

If you have any questions for the researcher you can email l.garwood-cross@edu.salford.ac.uk

Appendix F – 19 - 24-year-old information sheet, consent form and survey instrument

For the online survey, when respondents clicked the link to the survey they were presented with the information sheet on the first page, the consent form on the second page and the survey began from page three. This appendix provides all three as presented to the respondents.

Page 1: Information Sheet

Information sheet for questionnaire participants Social media and Sex and Relationship Education Study

Thank you for your interest in taking part in this study on social media and Sex and Relationship Education. This sheet lays out some information about the project to help you decide if you would like to take part.

What is this research about?

This study aims to the way young people seek and share information relating to sex and relationships. The study is looking to see if social media like YouTube, Instagram or other platforms is useful as a sexual health resource. Finally the study aims to understand if you trust social media, YouTubers and other influencers to give you accurate information about sex and relationships.

Why have I been invited to take part?

You have been invited to take part in the study because you are between the age of 19 – 24 and you live in the United Kingdom. We want the perspectives of young people of all gender identities, sexualities, and from a range of cultural, religious and racial backgrounds to make sure that all views are represented and no matter what your views are they are important.

What happens if I do take part?

If you choose to take part in this study you will complete a survey on the next screen which will take you roughly 10 minutes. The questions will give you a chance to share your opinions on social media, YouTube and influencers, as well as how you seek and share information relating to sex and relationships. There will be no follow up and so taking part should only take around 10 minutes of your time.

Do I have to take part?

It is up to you to decide. We will describe the study and go through the information sheet which we will give to you. We will then ask you to complete a consent form to show that you have agreed to take part. You are free to withdraw at any time, without giving a reason – simply close the survey if you change your mind.

What are the benefits of taking part?

Although there are no direct benefits to you in taking part, by sharing your opinions as part of the research you will be helping research into how sexual health resources and Sex and Relationships Education can be modernised, improved and made to serve you better.

What are the possible disadvantages and risks of taking part?

There should not be any disadvantages or risks from you taking part but the research is related to sex education, which may be a sensitive topic for you. You will be provided with links to support and advice services in case you do find the subject matter ever upsets you.

Are there any expenses and payments?

No, it will not cost you anything to take part and your participation can be done entirely online.

What if I change my mind?

If you change your mind about participating in the research after you have completed the survey it will not be possible to remove your responses due to the anonymous nature of the information. However if you change your mind during the survey you can close the survey window at any time, only the information already submitted will be used. If you have any concerns or questions at all about your participation either before or after completing the survey Contact Lisa Garwood-Cross at l.garwood-cross@edu.salford.ac.uk

What if there is a problem?

If you have a concern about any aspect of this study, you should ask to speak to the researcher Lisa Garwood-Cross (l.garwood-cross@edu.salford.ac.uk) who will do their best to answer your questions. If you remain unhappy and wish to complain formally you can do this by contacting the Research Supervisor Anna Cooper-Ryan at a.m.cooper-ryan@salford.ac.uk. If the matter is still not resolved, please forward your concerns to Professor Andrew Clark, Chair of the Health Research Ethical Approval Panel, Room L521, Allerton Building, Frederick Road Campus, University of Salford, Salford, M6 6PU. Tel: 0161 295 4109. E: a.clark@salford.ac.uk

Will my taking part in the study be kept confidential?

Yes, no one will need to know that you have taken part. **You are encouraged not to put your name or personal details anywhere on this survey.** All the data will be held on a secure server and no one will be able to identify you from the results of the research. However, if there are situations where your answers suggest that you or someone else may come to harm or that future criminal activity may be committed then the researcher may need to report these to a Designated Safeguarding Officer at the University of Salford.

What will happen to the results of the study?

The results of the study will be shared publicly via academic journal publications, conferences and in the PhD thesis of Lisa Garwood-Cross. You will not be identifiable in anything published or publicly shared relating to the research, your participation will be anonymous. If you would like to know about the findings of the research please email Lisa Garwood-Cross at l.garwood-cross@edu.salford.ac.uk and when the research is complete you will be provided with a post-research findings sheet once the research is completed so you can see how your contribution has helped to shape the outcome.

How long will the information I give be kept?

All the anonymous data collected for this research will be kept until 31st December 2024.

Page 2: Consent form

*Please complete and date this form **after** you have read and understood the study information sheet on the prior page. Read the following statements and select 'Yes' or 'No'.*

1. I confirm that I have read the information sheet for this study on the previous page. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

| | |
|-----|----|
| Yes | No |
|-----|----|

2. I understand that my participation is voluntary and that I am free to contact the researcher at any time to withdraw without giving any reason

| | |
|-----|----|
| Yes | No |
|-----|----|

3. If I do decide to withdraw I understand that the information I have given, up to the point of withdrawal, will be used in the research. The timeframe for withdrawal is

| | |
|-----|----|
| Yes | No |
|-----|----|

4. I understand that my personal details will be kept confidential and will not be revealed to people outside the research team. I will not be identifiable and my

| | |
|-----|----|
| Yes | No |
|-----|----|

participation is completely anonymous; my parents, teachers and educators will not be able to know I participated or what my answers were.

5. I agree to participate by completing the digital survey

6. I understand that my anonymised data will be used in the researcher's thesis, other academic publications, conferences/presentations, and further research.

7. I agree to take part in the study.

If you have selected 'No' to any of these boxes please close this webpage window now and thank you for your consideration.

If you selected 'Yes' to all these boxes please enter the date in the box below and click next to begin the survey.

[DATE BOX]

Page 3: Social media and influencers

Some of the questions in this survey will relate to relationships and Sex Education, you will be warned in advance of these questions and can skip any questions that make you uncomfortable.

This section of the survey will ask about your social media habits and what your feelings are on influencers.

Which of these devices do you have, or have access to at home? [Select all that apply]

- A mobile phone that is not a smartphone
- b. A smartphone
- c. A desktop computer
- d. A laptop or notebook computer
- e. A tablet
- f. A games console
- g. I have none of these

Which of these devices do you have access to the internet on? [Select all that apply]

- a. A smartphone
- b. A desktop computer
- c. A laptop or notebook computer
- d. A tablet
- e. A games console
- f. I don't have access to the internet

Do you ever use any of the following social media sites? [Select all that apply]

- a. Twitter
- b. Instagram
- c. Facebook
- d. YouTube
- e. Snapchat
- f. Tumblr
- g. Reddit
- h. TikTok
- l. None of these

Which of these devices do you use to access social media on the most? [Select one]

- a. A smartphone
- b. A desktop computer
- c. A laptop or notebook computer
- d. A tablet
- e. A games console
- f. I don't use social media.

Do you follow any people on social media who could be considered influencers? [select one]

For the purpose of this question an 'influencer' is a person who creates public content on social media with a large following (for example, over 40,000 followers) that you do not personally know.

- a. Yes, many
- b. Yes, some
- c. No

[If a or b is selected]

Why do you like to follow influencers?

[long form answer box]

Do you trust the influencers you follow?

- a. Yes
- b. No
- c. Some, but not all

[If c is selected]

Why do you not like to follow influencers?

[long form answer box]

Do you trust influencers?

- a. Yes
- b. No
- c. Some, but not all
- d. I don't know of any influencers

What do you think makes an influencer trustworthy or untrustworthy?

[long form question box]

Have you ever felt influenced to buy something because an influencer shared it or recommended it?

For example, have you ever purchased an item or really wanted it because you saw a social media influencer wearing it, using it or talking about it?

- a. Yes
- b. No

Do you watch videos made by YouTube influencers?

(YouTube influencers are also sometimes know as 'vloggers' or 'YouTubers')

- a. Yes
- b. No

If you see a social media video or post about something you think a friend will find useful, would you send it to them?

- a. Yes
- b. No
- c. Depends on the content

Which ways have you shared useful social media content to friends in the past?

- a. Facebook wall
- b. Facebook messenger
- c. snapchat message
- d. Instagram private message
- e. Tweet it to them (on twitter)
- f. Twitter private message
- g. text/whatsapp
- h. other *[insert answer]*
- i. I don't share social media content with my friends

Are you concerned about social media platforms having your data and why?

Data includes your personal details such as name, email, date of birth, and details about your online activity and what you engage in

[Long form answer box]

Page 4: Imagined scenarios

For the following questions imagine the scenario described and write what you would do. There are no wrong or right answers, we would just like to know how you might approach the situation.

If you find any of the questions in this section related to relationships and sex uncomfortable or upsetting you can skip the question and do not have to answer.

A friend tells you that they are having trouble in their relationship. Their partner often pressures them into sex when they don't feel like it. They don't know how to say no to their partner without upsetting them. Your friend asks you for advice, what do you do?

[long form answer box]

Your friend has told you they think there might be something wrong with them because they don't feel sexual attraction. Whilst scrolling YouTube you come across a video of someone talking about exactly what your friend told you. What do you do?

[Long form answer box]

Page 5: sexual health information needs and online/social media

The questions in this section will ask you about your opinions on accessing and sharing information about relationships and sexual health.

If you find any of the questions in this section related to relationships and sex uncomfortable or upsetting you can skip the question and do not have to answer.

If you have questions about sex, relationships or sexual health where would you be most likely to look for answers?

[long form answer box]

Who would you talk to if you were worried about something to do with sex, relationships or sexual health?

[long form answer box]

Do school lessons and parents/carers give you all the information you want to know about sex and relationships growing up?

- a. Yes
- b. No
- c. Other *[insert answer]*

Have you ever used the internet to find out information or answer questions about sex, relationships or sexual health?

- a. Yes
- b. No

What do you think are the benefits of using the internet to find out information or answer questions about sex, relationships or sexual health?

[long form answer box]

What do you think are the problems with using the internet to find out information or answer questions about sex, relationships or sexual health?

[long form answer box]

If you were looking for sex, relationship and sexual health information online, where would you look?

[long form answer box]

Have you ever watched a YouTube video on sex and relationships to get advice?

- a. Yes
- b. No

Do you follow or watch videos by any influencers who post about sex, relationships or sexual health?

- a. Yes
- b. No

If you answered yes to the last question, please name any influencers you can think of that you follow or enjoy content from who post about sex, relationships or sexual health, and what social media platforms you follow them on

[long form answer box]

What benefits do you think there are to using YouTube as a social media platform for accessing advice and information about sex and relationships?

[long form answer box]

What concerns do you have about using YouTube to access Sex and Relationships advice and information?

[long form answer box]

If you found a social media post/video about a sex or relationship issue that you knew a friend was having, would you share it with them? If so, how would you share it?

[long form answer box]

If you found a social media post/video about a sex or relationship issue that you knew a friend was having, would you talk to them about the information the video contained/use it to pass on advice?

- a. Yes
- b. No

How could your relationships and sex education have been improved?

[Long form answer box]

Do you think the questions in this survey had relevance to you? Why?

[Long form answer box]

Page 6: Demographics

Finally, please answer five quick questions about you and how you identify. You will remain completely anonymous. If answering these questions makes you uncomfortable you can skip to the final page of the survey which will give you information about where you can go if you need further help related to any of the issues raised in this survey

How old are you?

- a.19
- b.20
- c.21
- d.22
- e.23
- f.24

This question is about your gender identity. Do you identify as

- a.woman/girl
- b. Man/boy
- c.transwoman/transgirl
- d. transman/transboy
- e. non-binary/genderqueer/agender/gender fluid
- f. don't know
- g. prefer not to say
- h. other

Which of the following options best describes how you think of yourself?

- a. Heterosexual or Straight
- b. Gay or Lesbian
- c. Bisexual
- d. Other (insert answer)
- e. Prefer not to say

What is your ethnic group?

White

- a.English/Welsh/Scottish/Northern Irish/British
- b. Irish

- c. Gypsy or Irish Traveller
- d. Any other White background
Mixed/multiple ethnic groups
- e. White and Black Caribbean
- f. White and Black African
- g. White and Asian
- h. Any other Mixed/multiple ethnic background
Asian/Asian British
- i. Indian
- j. Pakistani
- k. Bangladeshi
- l. Chinese
- m. Any other Asian background
Black/African/Caribbean/Black British
- n. African
- o. Caribbean
- p. Any other Black/African/Caribbean background
(Write in ethnic group)
Other ethnic group
- q. Arab
- r. Any other ethnic group

What is your religion?

- a. No religion
- b. Christian (including Church of England, Catholic, Protestant and all other Christian denominations)
- c. Buddhist
- d. Hindu
- e. Jewish
- f. Muslim
- g. Sikh
- h. Any other religion

Page 7: Final page

Thank you for taking part in this study, your opinions and experiences are valuable to the outcome of this research.

If you have found taking part in this research in any way distressing or it has raised unanswered questions for you about sex and relationships, then you can find answers and support at: <https://www.brook.org.uk/help-advice/>

If you need to talk to someone about any of the topics raised during this study or are feeling distressed, you can call:

- The Samaritans on 116 123

- The Mix on 0808 808 4994 or use their text service: <https://www.themix.org.uk/get-support/speak-to-our-team/crisis-messenger>

If you have any questions for the researcher you can email l.garwood-cross@edu.salford.ac.uk

Appendix G - Recruitment materials

Young people's online survey materials

Social media posts aimed directly at young people

'Aged 13 – 18 in the UK? Share your views on Sex Education and social media in this quick 10 minute survey. Have your say about what you want to learn and how!'

The following images were used on Instagram with a swipe up function to directly link to the survey, and were also used in later posts on Facebook and Twitter to make them more eye catching.



Via parents for young people's online survey - Instagram post:

'Are you a parent of a teenager aged 13 – 18 years old living in the UK? I'm looking for teenagers aged 13 – 18 to take a short online survey about their experience of Sex and Relationship Education and how they use social media to share with their friends. I'd love to hear from a variety of people with a wide range of views and experiences. If you have a teenager in this age group who would be happy to answer the questions completely anonymously please pass on the link in my bio (Titled SRE Survey) to them. Thank you everyone!'

Via parents for young people's online survey Facebook post in parent groups:
'Hi everyone, I'm a PhD researcher at the University of Salford and I'm looking for teenagers aged 13 – 18 to take a short online survey about their experience of Sex and Relationship Education and how they use social media to share with their friends. I'd love to hear from a variety of young people with a wide range of views and

experiences. If you have a teenager in this age group who would be happy to answer the questions completely anonymously please pass on this link to them. Thank you so much.'

Email to schools for the young people's online survey

Good Morning,

I am part of a team at the University of Salford conducting online research into 13 - 18 year old young people's opinions on social media, influencers and Relationships and Sex Education (RSE).

We know that this year has been very busy and stressful in schools and that participating in research is something that is likely low on your priorities, however this research has been designed so that schools need only pass the information to parents and parents who are happy with their teenagers participating can pass on the URL for the online survey to their children.

The research has been granted full ethical approval by the University of Salford ethics committee, and although the research relates to RSE no questions of a sensitive personal nature about sexual experience are asked to young people. Instead, the survey focuses on young people's perception and usage of social media, if they follow influencers, and what their information seeking habits would be in relation to finding information about RSE information.

As part of the outcome of the research we hope to advise public health organisations on the development of free RSE video resources such as YouTube videos, that can be used not only by young people, but also by schools and parents.

If your school would be interested in participating in the research, please email me at l.garwood-cross@edu.salford.ac.uk, we can provide you with an email template to send to parents about the survey that contains the link, as well as attachments with parent and young people's information sheets, and we would be happy to show you the full survey questions to ensure that you are happy to be involved with the research.

We hope you will see the value in participation and if you have any questions at all, please don't hesitate to get in touch.

Yours sincerely,
Lisa Garwood-Cross
Research Assistant
School of Health and Society
University of Salford

Influencer interview recruitment

The following message was sent to influencers through their publicly available email addresses, the email addresses of their PR company, the 'contact' section of their websites, or direct message on one of their social media channels.

Hi X,

I am a researcher into digital sex education and social media at the University of Salford in Manchester. I'm researching how social media influencer accounts like yours can be used as a modernised version of peer-education with 13 – 18 year olds, particularly those who are underserved by traditional sex education such as LGBT+ young people. As part of this research, I will be analysing some of your public content. I know that time is of the essence for you but wondered if perhaps you would be happy to be involved with the project by answering the email questions attached below. The answers will be completely anonymous and won't identify you, but I really wanted to be able to include your perspective as a content creator who will have a unique perspective on the topic.

The hope is that this research will be able to encourage public health organisations to see the value of utilising partnerships with social media content creators like yourself for their unique value, as well as theorising solutions to any challenges faced in this area.

If you could spare just 10 minutes to answer the questions below, I would be so grateful. And if you would find it quicker to have a quick discussion on the phone or via skype just let me know and I can accommodate that instead. If you would like any additional information about the research then don't hesitate to ask.

1. What percentage of your audience demographic is made up of young people aged 13 – 18 years old?

2. Do you get young people reaching out to you via private messages to ask for advice on sex and relationship problems? If so, roughly how often and do you try to respond to them all?

3. Have you found any platform policies from YouTube or the other social media platforms you use have limited your ability to produce the content you would like? If so, please give examples.

4. Have you done any formal sexual health training? If not, is this something you

would be interested in?

5. How could public health or education organisations support you in creating Sex and Relationship Education content?

6. What is the process necessary for public health organisations to work with you?

7. Have you worked with any public health organisations on your platform? (Either through sponsorship, campaigns or on a voluntary basis)

8. Do you read the comments on your videos?

9. Do you do any moderation of comments on your videos?

10. Do questions from your audience feed back into the content you make?

Likewise if you would like to know more about the project or be further involved then your expert opinion is welcomed.

Thank you so much,
Lisa Garwood-Cross
University of Salford
School of Health and Society

Appendix H – Parental information sheet

Parental Information Sheet - Survey Social media and Sex and Relationship Education Study

What is this research about?

This study aims to find out what young people want to learn about in Sex and Relationship Education and how they prefer it be delivered. The study is looking to see if social media like YouTube, Instagram or other platforms would be useful to young people as an additional or alternative way to classroom learning. Finally the study aims to understand if young people trust social media, YouTubers and other influencers to give them accurate information about sex and relationships.

Why has my child been asked to take part?

Your child has been invited to take part in the study because they are between the age of 13 – 18 and live in the United Kingdom. We want the perspectives of young people from a range of cultural, religious and racial backgrounds to make sure that all views are represented.

Why have I not been asked for parental consent?

This research is inspired by critical youth studies which emphasises research that is performed with young people rather than on them. This research project has been designed with an advisory group of young people and the survey your child is taking was developed with young people aged 13 – 18 to ensure it is age-appropriate. As young people may feel shy discussing this topic with parents/carers and young people from the age of 13 are legally allowed to access sexual health services without parental consent it has been decided that young people can consent for themselves to participate in this study, although all young participants have been encouraged to discuss any questions they have about taking part with a parent.

Every care has been taken to ensure that this research is age-appropriate, no sensitive questions will be asked about your child's experiences of sex or relationships themselves, the questions will focus only on their learning experiences and how they feel about them as well as their social media usage and opinions.

What does this study involve?

Your child has been asked to complete a short 10 minute survey. The questions will give your child a chance to share their opinions on Sex and Relationship Education, where they go to get information and how/what they would like to be taught about the topic. They will also be asked to give their opinions on social media, YouTube and influencers. There will be no sensitive questions about their sexual experiences or anything of that nature, the focus of the study is on SRE learning and what young people feel about their existing learning experiences and how they could be improved.

What are the possible disadvantages and risks of my child taking part?

There should not be any disadvantages or risks from your child taking part but all participants will be provided with links to support and advice services in case you they find any part of the subject matter raises questions or concerns for them.

Are there any expenses, travel or payments?

No, participation is free, can be done entirely anonymously online and there are no financial incentives for taking part.

What if I have a problem with this research?

If you have a concern about any aspect of this study, you can contact the researcher (insert name and contact number) who will do their best to answer your questions. If you remain unhappy and wish to complain formally you can do this by contacting the Research Supervisor (insert name and contact number). If the matter is still not resolved, please forward your concerns to Professor Andrew Clark, Chair of the Health Research Ethical Approval Panel, Room L521, Allerton Building, Frederick Road Campus, University of Salford, Salford, M6 6PU. Tel: 0161 295 4109. E: a.clark@salford.ac.uk

Will my child's participation be kept confidential?

Yes, this survey is completely anonymous and participants have been encouraged not to put their

names or personal details anywhere in their answers. All the data will be held on a secure server and no one will be able to identify your child from the results of the research.

What will happen to the results of the study?

The results of the study will be shared publicly via academic journal publications, conferences and in the PhD thesis of [PhD Researcher]. Your child will not be identifiable in anything published or publicly shared relating to the research, their participation will be anonymous. If you would like to know about the findings of the research please email [PhD researcher] at [researcher email] and when the research is complete you will be provided with a post-research findings sheet once the research is completed so you and your child can see how their contribution has helped to shape the outcome of the research.

Appendix I – Conducting the systematic review

This appendix contains the details of the search strategy, inclusion criteria, screening and data extraction of the systematic review performed for this thesis.

Conducting the search strategy

A search was conducted across PubMed, PsychINFO, CINHALL, Web of Science, ERIC and Scopus. To cover as many health-related studies as possible for inclusion the search terms included a variety of areas where influencers may be used in relation to health e.g., in campaigns related to ‘mental health’ or ‘sexual health’ but also broader categories e.g., ‘health’ or ‘public health’ were included to try to include any form of health promotion. The search strategy and queries used can be seen in table 1 below:

| Line | Search query |
|---------|--|
| Line #1 | Search (Influencers [tiab] OR influencer [tiab] OR content creator [tiab] OR content creators [tiab] OR social media creators [tiab] OR Social media celebrity [tiab] OR social media celebrities [tiab] OR youtuber [tiab] OR youtube star [tiab] OR Youtube stars [tiab] OR video bloggers [tiab] OR video-bloggers [tiab] OR vloggers [tiab] OR video-blogger [tiab] OR video blogger [tiab] OR vlogger [tiab]) |
| Line #2 | Search (Sex Education [MeSH] OR Sex and Relationship Education [tiab] OR SRE [tiab] OR Relationships and Sex Education [tiab] OR RSE [tiab] OR Sexual Health Education [tiab] OR Sex [tiab] OR Sexuality [tiab] OR health education [tiab] OR health education [mh] OR PSHE [tiab] OR PSHEE [tiab] OR Personal Social Health Economic Education [tiab] OR Sexual health [MeSH] OR Mental health [mh] OR mental health [tiab] OR health [tiab] OR health [mh] OR health [tiab] OR health promotion [tiab] OR health promotion [mh] OR public health [mh] OR public health [tiab]) |
| Line #3 | Search #1 AND #2 |

Table 1 – Systematic review search queries

No limitations were put on date of the studies, except for that they needed to be published by the 15th May 2021 when the systematic review was conducted. Following the search of the selected databases all results were extracted and exported into Endnote (Endnote X9, 2020). A style was created to compile author, date, title and abstract information for all results and this data was exported into Microsoft Excel. All duplicates were removed manually to prepare the data to be cross referenced with the inclusion criteria.

Inclusion criteria and screening

For the first stage of screening abstracts were screened for the following inclusion criteria: The initial inclusion criteria for the systematic review were:

| | |
|-------|---|
| (i) | related to social media influencers (alternative terms such as content creators, social media stars, youtubers, social media celebrities, etc were also included) |
| (ii) | Related to health |
| (iii) | written in English Language only as financial constraints prevented the ability for translation |
| (iii) | Journal publications only. |

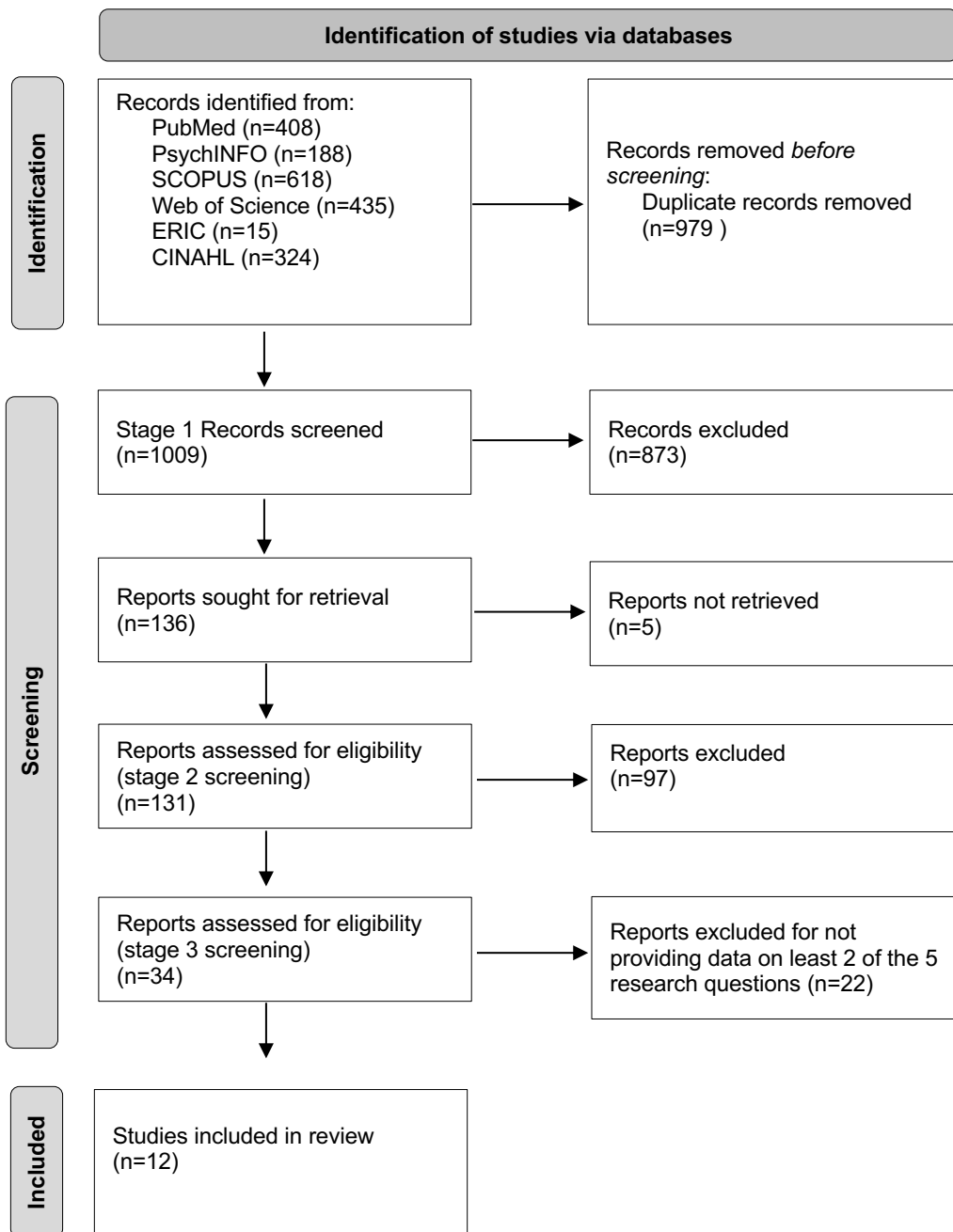
Any studies where the abstract was not clear on inclusion criteria were moved to the next stage for full text screening.

A second stage of screen was conducted on the full text of all results that had been passed the first stage of screening (n=136). At this stage additional inclusion criteria were added as they could be checked against the full text

| | |
|-------|--|
| (v) | Influencers had to be a key focus of the study, as many studies that mentioned influencers in their abstracts had only one or two sentences in the full text around influencers and were deemed unusable for the purpose of this review |
| (vi) | the study must give a clear indication of what an influencer is or description of the influencers they used, as many studies did not contain an adequate explanation of what they considered an influencer to be which made it impossible to be certain that their findings were about the same understanding of 'influencers' that this review sought to understand |
| (vii) | must be peer reviewed. |

Finally, a third stage⁸⁷ of screening identified if the studies from stages 1 and 2 (n=34) met the research questions of the systematic review. As 5 research questions is a large number for a systematic review, studies were eligible at this stage if they contributed to at least 2 of the 5 questions. A total of (n=12) studies met the requirements for all three screening stages. Flow diagram 1 below demonstrates the full process for screening:

⁸⁷ NB: Screening stages two and three could arguably have been combined into a single stage for anyone replicating this review, however I wished to keep a clear and separate list of studies that met the criteria following stage 2 for future research purposes, even if they did not meet the research questions for this systematic review.



Flow Diagram 1: Systematic review screening process

Extracting the data

Data was extracted from the (n=12) studies that passed all three stages of screening. Detailed information about each study was collated in an excel spreadsheet, collecting the following values: author; year; title; location; abstract; influencer definition; demographics of influencers used in the study; social media platform; health topic; any audience demographic used in the study; methods; the findings for the 5 research questions; limitations; and any notes I had about the study. The findings for each of these values were then compared, contrasted, and synthesised.

Quality Assessment

Quality assessment was conducted on all studies using Kmet, Cook & Lee's (2004) Standard quality assessment criteria for evaluating primary research papers from a variety of fields. The quality was varied and some papers such as Gil-Quintana, Santoveña-Casal & Riaño, (2021) which scored the lowest provided confusing methodological descriptions or lacked clarity, however given the limited number of studies all were included to gather any insights from them that were possible.

| Study | Qualitative or Quantitative | Score |
|---|-----------------------------------|-------|
| Topf & Williams, 2021 | Qual | .55% |
| Ngai, Singh & Lu, 2020 | Quant | .90% |
| Zou, Zhang & Tang, 2021 | Quant | .90% |
| Cheng et al., 2020 | Mixed? Qual | .70% |
| Bonnevie et al., 2020 | Quant | .95% |
| Guo et al., 2020 | Qual | .65% |
| Rawatte & Mattacola, 2021 | Qual | .95% |
| Pilgrim & Bohnet-Joschko, 2019 | Quant | .54% |
| Sabbagh, Boyland, Hankey & Parrett, 2020 | Quant | .90% |
| Gil-Quintana, Santoveña-Casal & Riaño, 2021 | Quant | .50% |
| Sofian, 2020 | Qual | .70% |
| Folkvord, Roes & Bevelander, 2020 | Quant | .95% |