A Critical Evaluation of Information Sources Used in the Tourist Destination Decision Making Process

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Abstract

The tourism industry is one of the largest in the world; it is also an industry which is growing in terms of its overall contribution to global GDP and employment and in terms of the number of destinations which seek to attract tourists (World Travel and Tourism Council, 2015). Concurrent developments in information communication technology serve to amplify the tyranny of choice faced by tourist destination decision makers by providing greater information on the growing list of possible destinations, resulting in an ever more complex decision making process. The holiday destination decision is one which evoke high levels of product and purchase decision involvement, both of which encourage an extended, more comprehensive decision making process; this in turn elicits the collection and assimilation of greater amounts of information about the various alternatives. Information search, however, is limited by a number of factors (the time available to the decision maker and cognitive processing capacity being chief amongst the limitations), therefore the information about each destination that is critically analysed by the decision maker during the destination decision making process is not uniform. Understanding the role that the various information sources play (how they are perceived, whether they are used and whether their use influences the likelihood of the destination being chosen or not) during the tourist destination decision making process is important to professionals engaged in the marketing of tourist destinations. However, in the words of Choi *et al* (2012, p. 26) 'there has been no empirical research attempting to explore information use patterns within the structure of the decision-making process in the tourism literature'. As a result, the aim of this research was to identify and evaluate a complete choice set model of the extended Destination Decision Making process and review critically the role of information sources within that affect the process.

A web based questionnaire was used to collect quantitative data from a sample (judgement sampling was used due to the lack of a sample frame) who were asked (amongst other things) about the destinations that they considered during the destination decision making process, why they rejected destinations, which information sources they used to research the destinations and what their perceptions of the information sources were. The data collected were analysed using SPSS statistical software package. The findings confirmed the validity of the choice set model which was presented and tested within this research. The findings also demonstrated that a construct of 'perceived utility of information sources' exists which is a compound of the sources' perceived level of bias, how up to date it is, how easy it is to access and the value that can be obtained through that source. An information sources' perceived utility was found to be positively correlated to whether it is used or not. Furthermore, the results of this research identified statistically significant relationships between the use of an information source and the likelihood of the destination researched through that source being selected (or rejected), thus drawing a link between perceived utility, use of an information source and the likelihood of destination selection/rejection. Finally, the results of statistical analysis also showed that demographic differences affect the perceived utility of information sources, whether they were used in the destination decision making process and the likelihood of a destination being researched through the source being selected or not. The findings of this research can be used by professionals responsible for destination marketing who can establish the perceived utility of the information sources that they use amongst their target market in order to maximise the likelihood of their destination being selected.

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Chapter One - Introduction

1.0 Overview of Chapter

This chapter will provide a broad introduction to the research, establishing the context within which the research is embedded as well as a rationale for the need for the research. The aim and objectives will be presented as well as the hypotheses that will be tested. The research methodology will be introduced and the organisation of the study will finally be described.

1.1 Research Background

The tourism industry is one of the largest industries in the world, directly contributing nearly $2.4 trillion to global GDP and employing 9.4% of the global workforce in 2014 (World Travel and Tourism Council, 2015). In 2014, the number of international visits alone (which excludes national tourist figures) reached a record level of 1.1 billion (World Tourism Organisation, 2015) with 33 million visiting the UK (UK Tourism Alliance, 2015). Countries, destinations and organisations competing for market share in the tourism industry must face the challenges posed by existing and new rivals as well as an ever changing information landscape through which they must communicate with the tourist in the hope of attracting their custom. Understanding how tourists decide between competing destinations is vital to organisations wishing to protect or grow their share of the market and has been widely researched in academic and industry settings. Of equal importance is to understand how the information supplied by tourist organisations is accessed and subsequently perceived by the destination decision maker; a subject which has also been widely and regularly researched. According to Tan and Chen (2012), it is important for practitioners (destination marketers) to understand how users interact with tourist information in order to find the best means to leverage the source. However, research which combines analysis of the destination decision making process and the role that information sources play during this process is scarce despite the its value to tourist organisations. In the words of Choi *et al* (2012, p. 26) 'there has been no empirical research attempting to explore information use patterns within the structure of the decision-making process in the tourism literature'. This creates a need to address this gap in order to improve the understanding of the role of information sources that destination decision makers use in the decision making process. Improving this understanding would result in the development of more efficient and effective communication strategies.

1.2 Context of the Study

This study will be contextualised within two domains, firstly the tourist destination decision making process, and secondly tourist information sources. The consumer decision making process has previously been divided into four types; nominal, brand loyalty limited and extended (Hawkins *et al*, 2007). The type of decision making that is applied by the decision maker is an outcome of the risk that they attach to the choice; where the risks of making the wrong choice is low or where the negative consequences of such as choice is negligible, nominal decision making will be applied. Where the risk or consequences are not negligible, but still relatively low, limited decision making will be applied, however, extended decision making will be applied in contexts where the risks or negative consequences of making the wrong choice are high, such as is the case in holiday destination decision making which often involves a significant investment of time and money as well as high opportunity costs. This research is embedded within the destination decision making process as it represents a decision which manifests itself within the extended decision making process allowing the researcher to include relevant facets of decision making such as involvement theory, heuristic strategies, information search stopping rules and extended decision making process models.

The second part of this research is embedded within the context of tourist information sources, i.e. the sources available to tourists that provide information on destination characteristics. These will (in the main) be engaged with as part of the destination decision making process, however, the information landscape (the types of sources, their characteristics as well as the information provided) has gone through a revolution since the advent of Web 2.0 in the early '00's. Web 2.0 facilitated user generated content and is most widely recognised as social media in which individual members of the public can disseminate their own views globally via the World Wide Web. The effect of this increase in the capacity for communication on the commercial world, including the tourism industry has been wide ranging, but has had a particular effect on the trust relationship between commercial information providers and the customer with the effect being a shift in information searching away from commercially provided sources towards non-commercial sources (Jacobsen and Munar, 2012).

1.3 Justification for a focus on the Tourism Industry

Situations involving extended decision making processes allow for rich, comprehensive, holistic research to be conducted and as a result, many authors researching decision making have focused on purchases within the Tourism industry (e.g. Zins, 2009; Correia *et al*, 2010; Munad and Jacobsen, 2014). The industry is a highly complex mixture of products and services that are almost always heterogeneous in nature due to the fact that the outcome is largely a psychological experience (Chon, 1989) resulting from an interaction between the product and customer. The fact that Chaos Theory and Complexity Theory[1] are becoming prevalent in research on the Tourism industry confirms its intricate and overwhelming nature in terms of understanding the dynamics of the complete tourism system (Stevenson *et al*, 2009). An in depth discussion of Chaos and Complexity theories is not intended or necessary here, but the escalation of research applying these theories to the tourism industry clearly demonstrates that it is an industry capable of providing all of the requisites for studies on all categories of consumer decision making processes (nominal, brand loyalty limited and extended).

An example of Inertia within the tourism industry may be travel insurance that is automatically renewed annually unless the customer takes action to discontinue the policy. In this kind of situation, the consumer is likely to deem the effort required to research better options outweighs the possible benefits of switching. Brand loyalty may be evidenced in the tourism industry in the repeat purchases through a specific travel agent or airline and although it may not be as obvious, tourists who return to the same holiday destination also demonstrate brand loyalty towards the destination. However, as stated already, the inertia and brand loyalty categories spawn less research than the limited and extended categories because there is little or no consideration of alternatives and therefore no significant information processing and no protracted decision making process Hyde, 2008). Despite this, their inclusion in decision making literature is not entirely superfluous, in fact inertia and brand loyalty can be directly linked to both the cause of certain purchase behaviour and the result of many purchase variables, one of which being the risk associated with a specific decision. The extent of decision making can depend on the level of risk that an individual is willing to

[1] Chaos Theory is applied to try to establish simple rules that explain how large systems (such as the overall tourism system) work whereas Complexity Theory is used similarly to analyse how the small components (such as individual tourists or tourism elements) behave and interact to create the dynamic, evolving system in its entirety. According to Harvey (2001), Chaos theory 'studies the external systems of complex systems' while complexity theory focuses on the 'internal sub-systems of complex systems'.

take, and Inertia and Brand Loyalty represent risk reducing strategies (Roselius, 1971) relating to a purchase as a result of familiarity borne from previous satisfactory purchases.

1.4 Aim, Objectives and Hypotheses

During the review of the relevant literature, the following research questions emerged;

1. What is the perceived utility value of each information source?
2. Does the perception of each source significantly affect the likelihood of it being used in the decision making process?
3. Does the use of certain information sources to research destinations significantly affect the likelihood of the destination being either chosen or rejected?
4. Do demographic differences affect the role of information sources in the destination decision making process?
5. Is the composite Choice Set Model (which is proposed within this research) an accurate representation of the destination decision making process?
6. Are the individual sets within the composite CSM ontologically sound?
7. What effect do passive information sources have on the early consideration stage of the decision making process?
8. Which information search 'stopping rules' are applied at each stage of the decision making process?

Having synthesised the existing literature and identified salient research questions, the following goals were established for this research.

Aim:

To identify and evaluate a complete choice set model of the extended Destination Decision Making process and review critically the role of information sources within that affect the process.

Objectives:

1. To empirically test the descriptive validity of choice set models
2. To determine the ontology of choice sets
3. To critically evaluate the perceived nature of information sources and their role within the extended decision making process

Furthermore, the following hypotheses were established and tested as part of the study:

H1: The decision to use a specific information source in the destination decision making process or not is correlated to its perceived utility.

H2: The use of certain information sources to research destinations significantly affects the likelihood of the destination being either chosen or rejected.

H3: Demographic differences affect the role of information sources in the destination decision making process.

H4: the Composite Choice Set Model, proposed in this research, is an accurate representation of the mechanics of the decision making process.

H5: Each individual choice set are ontologically valid.

H6: non-compensatory heuristic strategies are applied at the Early Consideration Stage, and compensatory heuristics are applied in the Late Consideration Stage.

Following the literature review, the research methodology is presented in Chapter Three and the research methods used for the collection of primary data are also discussed. A post-positivist research philosophy was adopted as the goals of this research require objective testing, but the involvement of humans within the research means that a purely positivist approach was not deemed prudent. Quantitative data collection methods were applied in the form of an online questionnaire – this method was chosen in order to ensure that respondents had access to the internet and had the basic skills required to navigate the World Wide Web, both of which were considered vital due to the significance of online tourist information sources. Non-probability sampling was required due to the absence of a sample frame. The sample was analysed to ensure that it was not biased and then filters were applied to screen for respondents who were not suitable (if, for example, their responses referred to a business trip for which they had no choice over the destination). The

questionnaire and the data collected were tested for content, construct and criterion based validity. The questionnaire was also tested for reliability in terms of stability and consistency through a test, retest procedure and a separate pilot study. The data were then analysed using the SPSS software package in order to address the research questions and to test the hypotheses listed below.

Chapter Four presents the results and discussion simultaneously in order to simplify the contextualisation of the findings and was organised in two distinct sections: first the results pertaining to the destination decision making process and the composite choice set model; and second the results pertaining to the role of tourist information sources. This second section analysed the role of information sources (their use, the impact on the decision and the perceptions of the sources) at both the early consideration and late consideration stages of the decision making process in order to achieve the overall aim of the research.

Finally, Chapter Five presents the conclusions of the research and the recommendations that emerge from the overall project.

1.5 Limitations

It is acknowledged that this, as is common in social research, has its limitations. The most significant of which is the fact that the findings from this study, while valid, represent the status quo at the moment of time at which the data were collected. The behaviour of the sample used within this research will inevitably change to some degree, as will the nature of the tourist information landscape. A second limitation was the quantitative nature of the research design which does not allow for rich understandings to be developed regarding the reasons behind individuals' perspectives. However, this research design was the most appropriate to achieve the aim and objective of the study and also builds on previous qualitative work by authors such as Decrop (2010), thereby allowing the research agenda to progress. As they hypothesis put forward in this research have now been tested, qualitative research may be conducted to further the research. A final limitation which emerged was the lack of sufficient different nationalities within the sample to allow for analysis of any statistically significant finding relating to cultural impacts on information search. Again, this may be an area that could be focused on in further research.

1.6 Organisation of the Study

The research is organised into five distinct chapters. Chapter one, the introduction, presents an overview of the entirety of the study. Chapter Two presents a review of the current research agenda and is divided into three focal areas; the motivation for the decision making process (why do consumers expend resources such as time and money making decisions), the special aspect of information search (which information sources available and what are their perceived characteristics) and the operational aspect of the decision making process including salient decision making models. Although the three subjects are linked in reality, they are normally researched separately and the literature review was therefore organised to reflect these three focal areas. The first focal area critically analyses the research agenda on the issue of motivation in terms of motivation to engage in decision making, risk and involvement; it also discusses motivations for information search and the effect of prior knowledge. The second focal area within the literature review provides an overview of contemporary tourist information sources and provides a detailed discussion of relevant research on the development of the information landscape, the impact of the World Wide Web and the perceptions of the information sources by demographics. The literature review concludes with an overview of contemporary destinations decision making process models and a synthesis of information source usage patterns within the decision making process. This final element of the literature review which combines the research on tourist information sources and destination decision making reflects the gap that this research is intending to fill. As stated by Choi (2012, p. 26) 'there has been no empirical research attempting to explore information use patterns within the structure of the decision-making process in the tourism literature'.

1.7 Contribution to Research

The results of this research contribute to the understanding of the tourist destination decision making process, and more specifically to choice set theory of decision making. It also develops the understanding of why certain information sources are used in the decision making process while others are not used. This use of information sources is analysed for different demographics to identify the specific behaviour of people within those demographics and the results identified that the choice of information source is significantly affected by demographic variables.

Chapter 2 - Literature Review

2.0 Overview of Chapter

This chapter will present an overview of salient research on both consumer decision making and the information search process; two subjects which have been researched separately, but together represent the core elements of tourist destination decision making. The chapter will focus on three main areas; the motivational factors involved in decision making and information search, the information sources available to destination decision makers and contemporary destination decision making process models.

2.1 Chapter Introduction

Various authors have proposed structures to research on decision making and information searching, for example, Fodness and Murray (1999) ascribe to the tripartite structure; spatial, temporal and operational. Spatial refers to the location of the information sources that are used in decision making, initially internal and thereafter focusing on the multitude of external sources. Temporal refers to the timing of information search which can be inferred to mean the stage of the decision making process, and operational refers to the dynamics of decision making and the processes involved. Other authors, (for example Schmidt and Spreng, 1996; Beigler and Laesser, 2004), prefer to organise research on decision making and information search by dividing the issues into motives, economics and processes. Motivational issues rely on psychological research on consumer behaviour such as involvement and the perception of risk (both of which will be discussed in detail within this project). Economic issues relate to the consumers' cost/benefit analysis and selection based on the sacrifices required measured against the expected outcomes. Process issues relate to models of the stages (linear or not) that decision makers go through from problem recognition to post purchase evaluation (a.k.a. operational).

The issues most relevant to this research are motivational, spatial and operational aspects of decision making and information search, as between them they address the questions of why consumers dedicate resources such as: time and money to decision making; where consumers search for information; and what is the process that decision makers go through to arrive at a final choice. Within this research, an amalgamation of the structures suggested by Fodenss and Murray

(1999) and Beigler and Laesser (2004) is required for the following reasons; firstly, motivation is a prerequisite for the conduct of any activity including decision making and information search. Secondly, the selection of information sources used in the decision making process is central to the aim of this research and this selection is underpinned by a cost/benefit analysis being conducted by the decision maker, therefore the spatial aspect is relevant. Finally, the operational aspect of decision making must also be researched in order to develop an thorough understanding of the process of destination decision making as well as to achieve the objectives of this research relating to identifying a relationship between information sources, and their influence on the decision making process at various stages. Much research has been conducted on decision making processes and the use of information sources, however, 'there has been no empirical research attempting to explore information use patterns within the structure of the decision-making process in the tourism literature' (Choi *et al* 2012, p. 26). This research aims to combine these central themes.

It is worth noting that the concept of service dominant logic has been adopted within this research. While some authors included in this literature review may indicate a distinction between products and services and use the term product very specifically, this study supports the theory that marketing theory has evolved from being chiefly concerned with the product (or service provided to the customer) to the view that services underpin all marketing functions including the creation of the product. Vargo and Lusch (2004) describe it thus; 'the service-centred dominant logic represents a reoriented philosophy that is applicable to all marketing offerings, including those that produce tangible output (goods) in the process of service decision.' There are many terms such as 'product involvement' which have been accepted in the research agenda as a label for a construct, but it is intended here that the use of such terminology be read with the understanding that since these terms became adopted, a new dominant logic for marketing has emerged which requires the reader to interpret the terminology accordingly. Destinations are the centre of the decision making process in this research and whether they should be deemed 'products' or 'services' or a combination of the two is irrelevant to the concept of service dominant logic.

2.2 Motivational Aspects of Decision Making and Information Search

Hyde (2008, p. 127) described the motivation for consumers to engage in decision making 'as being the most central to predicting other aspects of consumer behaviour' in his research on independent

traveller decision making. Motivation is the instigator of the decision making process and is predominantly driven by the presence of risk and involvement, both of which are discussed below.

2.2.1 The Role of Risk in Decision Making

Decision making involves a selection between alternatives with different attributes (where attributes are identical, no decision is necessary), and the selection will have net positive or net negative outcomes relative to the potential outcomes of the rejected alternatives. Decision making processes are undertaken for the sole purpose of minimising the risk of selecting the inferior alternative. Therefore, it is logical to identify 'risk as the core concept of consumer theory' (Conchar *et al*, 2004, p. 418). In partial support of this logic, Choffee and McLeod (1973) and Mitchell (1998) state that risk is an antecedent of involvement (discussed later) especially in contexts where the value of the stakes (such as money, time etc.) are relatively high. The issue of risk permeates every aspect of research within the field of consumer decision making and this explains why the issue of risk has continued to hold prominence in marketing psychology research.

One issue that requires immediate attention in discussions of risk is the apparent paradoxical situation where a consumer may demonstrate high levels of risk aversion during the purchase decision making process by carrying out extensive information search prior to the purchase decision, yet they may also demonstrate a willingness to engage in physically risky activities in order to reach their 'optimum stimulation level' (Raju, 1980, p. 272). This is an issue of semantics and it is important to clearly identify the distinction between risk inducing hedonic-experiential activities such as skiing, scuba diving and white water rafting and risks involved in purchase decision making processes. Some authors attempt to address this apparent paradox by clarifying the terminology and differentiating between risk and uncertainty. For example, according to Quintal *et al* (2010, p. 322) 'risk exists where probabilities of outcomes are known, while uncertainty exists when probabilities of outcomes are unknown'. Furthermore, Hofstede (2001) argued that risk avoidance is not the same as uncertainty avoidance and uncertainty avoidance behaviour may be demonstrated by consumers searching for information on the alternative products or services in an attempt to reduce or eliminate that uncertainty and maximise the utility of their purchase. A simple analogy of the distinction is that people demonstrating uncertainty avoidance will put their hand in a black box to discover the unknown contents whereas someone demonstrating risk avoidance will not. Marketers

and marketing psychologists should be aware of the distinction and its implications, as it has been established empirically (Quintall *et al*, 2010) that uncertainty avoidance tendencies motivates decision makers to search for more information during the information search stage of the consumer decision making process. The practical implication is that where complex decisions must be made, such as the choice of holiday destination alternatives, the destination management organisation, tour operator, hotel etc. that provides more thorough (and positive) information will be more likely to be selected at the purchase stage. As a result, Hofstede's (1991) Cultural Uncertainty Avoidance Index which scores a cultures' inclination to uncertainty avoidance is extremely valuable to organisations operating in international markets such as the tourism industry as they can manipulate their promotional activities accordingly.

According to Mitchell (1998), the terms 'risk' and 'uncertainty' have probably been used synonymously 'because marketers feel that consumers never really know the exact probability of an outcome' therefore some level of uncertainty will always exist resulting in the ubiquity of risk. Authors on the subject of risk give evidence of the concept of uncertainty as an element of risk in many of the definitions that exist in the literature. For example, Zinkhan and Karande (1991, p. 741) stated that risk is encountered 'when an individual's action produces social or economic consequences that cannot be estimated with certainty'. Conchar *et al* (2004) summarises that definitions of risk within marketing literature involves two elements: consequences; and the level of uncertainty. In agreement with this summary categorisation, many authors (e.g. Tarpey, 1975; Peter and Ryan, 1976; Vincent and Zikmund, 1976; Beardon and Mason, 1978; Dowling, 1985; Hyde, 2008) view risk as two dimensional (consequences and uncertainty) but simultaneously as a multifaceted construct; the facets representing the different types of risk that can exist in consumer decision making.

2.2.1.1 Types of risk in consumer decision making

There are many types of risk that make up the facets of the construct and the range of typologies is almost as extensive as the number of authors on the subject. Initially, a distinction must be made between the types of risk involved in the consumption of tourism products and the types of risk involved in the purchase decision making process. Lepp (2003) summarises the risk categories related to the consumption of tourism put forward by various authors as; (1) terrorism, (2) war and

political instability, (3) health concerns and (4) crime. Maser and Weiermair (2008) state that risks involved in tourism are 'being exposed to terrorist acts, having problems with transportation or accommodation, becoming entrapped in a country's political turmoil and/or being generally dissatisfied with the travel experience'. Although the final type of risk put forward by Maser and Weiermair (2008) can be related to the purchase decision, generally the risks involved in the decision making process are distinct from the risks involved in the consumption of tourism as can be seen from the discussion below.

Dowling (1986, p. 194) states that there is 'little consensus regarding a common set of risk facets applicable across purchase situations'. For example, Roselius (1971) categorised the facets of consumer loss (risk) as time loss, hazard loss, ego loss and money loss. Roehl and Fesenmaier (1992) stated that risk can be physical risk, equipment risk, financial risk, psychological risk, social risk, satisfaction risk or time risk. Roehl and Fesenmaier's (1992) typology is largely in agreement with a typology put forward by Jacoby and Kaplan (1972) and contains the following five categories of risk:

1. Financial risk; money can be considered to be wasted, for example, through purchasing a skiing holiday and the resort lacking snow, or money could be seen to be lost, possibly through online fraud or even pick pocketing in popular tourist areas. There is a positive correlation between the cost of the product and the level of risk attached (Hoyer and MacInnes, 2004) due to the increased severity of negative consequences.
2. Physical risk; where the outcome of the purchase decision may physically harm the consumer. The avoidance of physical risk is normally the fundamental priority of purchase decision making processes, however, within the tourism industry many authors have found that consumers are more willing to accept physical risk than they would be in normal purchase situations. Adventure tourism should be regarded as a broad subject (Walle, 1997), but many authors focus on the requisite of risk. For example, Ewert (1989, p. 13) claims that the distinguishing feature of adventure [tourism] 'is the deliberate seeking of risk and uncertainty of outcomes'. Boorstin (1961, p. 116-117) previously described tourists as 'either mass tourists or adventurers who expose themselves to danger for the thrill and excitement which it involves'. The semantic distinction between risk and uncertainty can nullify the apparent paradox in risk taking, as discussed previously.

3. Psychological risk; where the outcome of the purchase decision may harm the consumers' ego. The selection and consumption of certain products can either support and reaffirm a person's ego structure and belief system or it can contradict it resulting in unwanted psychological side effects. (The controversial issue of sex tourism may illustrate this point clearly. If a person who is normally against the concept of prostitution then engages in it during a holiday, upon their return, they may suffer from negative emotions such as guilt, denial or even self-loathing.) The temporary justification of allowing one's self to try new things on holiday is evanescent and the overall effect of this decision on the psyche may be a harmful one. Many other examples of psychological risk exist within the tourism industry wherever a person's ethics are threatened by their actions (exploitation of host community and the environment are two prevalent issues related tourists' conscience). According to Blythe (1997) psychological risk can also be manifested through simple frustration arising from complications during the information search and decision making process.
4. Social risk; where there is 'potential harm to one's social standing that may arise from buying, using or disposing of an offering' (Hoyer and MacInnes, 2004, p. 60). Again, there are parallels with psychological risk due to the connection between a person's ego and their perception of their social standings. Blythe (1997) states that the level of social risk is dependant in part on the level of product visibility (how noticeable the product is to the community in which the purchases interacts) and puts forward a simple linear correlation between the level of visibility of a product and the inherent social risk associated with a purchase decision.
5. Performance risk; where the performance of the product is deemed unsatisfactory. Performance risk is one of the principal concerns for consumers in the tourism industry due to the nature of the majority of the more expensive purchases involved. Tourism products such as flights, accommodation, car hire, tours etc. are normally bought in advance, away from the point of consumption and cannot be trialled beforehand. Reichel *et al* (2007) found that the inherent characteristics of the tourism 'product', namely its intangibility, inseparability, variability and perishability, intensify the consumers' perceived risk of poor performance compared with other products. They state that 'the fear of expectations not being met, or disappointment with a trip or choice of destination seem to prevail among travellers' (Reichel *et al* 2007, p. 224). (Dis)satisfaction can only be determined in the post purchase evaluation stage of the decision making process, but customer satisfaction is still vital for profit driven organisations as 'satisfaction can affect customer retention and also lead them to recommend the goods or service to others' (Loerenzo 2010, p. 157). This is

significant for two reasons; firstly because 'it was estimated that a 5% increase in customer retention rate produces a 25% to 85% profit increase' (Reichheld and Sasser, 1990) and secondly because '60% of sales to new customers could be attributed to word of mouth referrals' Reichheld and Sasser (1990). Abdlla *et al* (2007) also claim that organisations that satisfy expectations and have customer loyalty also benefit from a greater tolerance to price increases.

The research agenda on the way that consumers measure their satisfaction has evolved steadily. According to Oliver (1980) whether the performance is satisfactory to the consumer or not is not a simple, linear construct. A satisfactory performance occurs when actual performance is equal to or greater than expected performance. If the actual performance is better than the expectations, this leads to positive disconfirmation, and the consumer is satisfied increasing the chance of repeat purchase. If the actual performance is below expectations, negative disconfirmation exists and the consumer is dissatisfied, making a repeat purchase unlikely. Chon (1989) relates this to tourism by stating that what the tourist actually sees, feels and achieves in a destination is compared to their previous image and satisfaction is concluded based on the comparison. This comparison is central to the reflective stage of the decision making process; post purchase evaluation.

Academics (e.g. Parasuraman *et al*, 1988; Cronin and Taylor, 1992) researching customer satisfaction in the service industry have identified problems when researching the construct of customer satisfaction. Gaps models such as Parasuraman *et al's* (1988) SERVQUAL model which measure the difference (or gap) between expected performance and perceived actual performance rely on the tourist or hotel guest forming an accurate expectation of the performance, however, researchers such as Cronin and Taylor (1992) as well as Parasuraman *et al*, (1988) themselves found that expectations of performance were normally overestimated.

The relevance of this area of research to tourist destination decision making is that marketers must strive to ensure that accurate portrayals of the destination are presented in order for the decision maker to form reasonable expectations, thus avoiding dissatisfaction. In fact, it is important for the marketer to consider all five types of risk in order to attempt to reduce them in the eyes of the destination decision maker and encourage the decision maker to select or at least consider the destination that the marketers represent.

2.2.1.2 Measuring the Level of Risk

It can be seen that the various types of risk can play a significant role in the consumer decision making process, but an understanding of the *level* of risk associated with decisions is also necessary for those researching the subject as the priority for consumers is to avoid or at least minimise the level of each type of risk (Mitchell, 1999). According to Hyde (2008) the levels of risk associated with a purchase decision are dependent on the product characteristics, voluntary actions and personality of the consumer. Complex products, new products and product ranges where the alternatives are highly differentiated will carry more risk in one or more of the type categories identified by Jacoby and Kaplan (1972) above. Hyde (2008, p. 56) claims that whether the purchase is voluntary or involuntary will be significant to the level of risk involved; 'voluntary purchases are associated with lower levels of perceived risk than involuntary purchases'. Finally, Hyde (2008) states that personality variables such as self-confidence, self-esteem and levels of anxiety will influence the level of risk that the consumer attached to specific decisions. Psychologists have also found that the part of a person's brain that receives information and makes immediate judgements about the associated threat level, the amygdala, is also influenced by genetics, 'making some people more vulnerable than others to developing fears and anxieties about various things' (Gilbert, 2009, p. 34). If the level of risk varies depending on individuals' personality and genetic constitution, this implies that risk is subjective rather than objective or that it is a figment of perception.

2.2.1.3 Perceived Risk

Of the two dimensions of risk (uncertainty and consequences), uncertainty can be defined as an 'individual's probabilistic beliefs' (Dowling, 1986, p. 194), and consequences as 'the importance of loss' (Dowling, 1986, p. 194). The importance of loss will clearly be measured by the consumers' internal valuation system based on a combination of monetary value, emotional value or value to the person's psyche and the time and effort required to ameliorate the loss (which may not be at all possible in many cases). The personality of the individual consumer will also be relevant to the decision making process in terms of their level of risk acceptance or risk aversion. A specific combination of type and level of risk may be acceptable to one consumer, a 'risk seeker', yet the same combination can simultaneously be unacceptable to another, a 'risk avoider' (Dowling, 1986). Consumers that demonstrate risk aversion tendencies are more likely to be motivated to attempt to

minimise the uncertainty associated with decision making through a more extensive and comprehensive decision making process (Hyde, 2008).

The measurement of perceived risk is relatively uncomplicated if tackled from a certain angle; measuring a decision makers' perceived level of risk can be operationalised by applying subjects' responses to surveys to a variety of models. Two such models are Cunningham's (1967) unadorned two component[2] model or Dowling and Staelin's (1994) two component[3] model which included the notion of risk acceptance levels in its construction. However, measuring the actual accuracy of a decision makers' perceived level of risk is far more complicated and controversial due to the requirement for an objective and exact measure of risk. The kernel at the centre on the debate was included in the extract from Quintal *et al* (2010, p. 322) above in their distinction between risk avoidance and uncertainty avoidance; 'risk exists where probabilities of outcomes are known'. The debate centres on whether the objective probability of a certain consequence occurring can accurately be measured and therefore known (the theoretical process of decision makers identifying and quantifying risk as part of the decision making process is discussed further within the section covering the operational aspect of consumer decision making). Whether or not perceived risk can be accurately measured or not, its presence is closely associated with another psychological construct; involvement.

2.2.2 Involvement Theory

2.2.2.1 Ego, Enduring and Product Involvement

A psychological extension of the concept of risk in decision making is the concept of involvement which in itself, serves to motivate a more rigorous decision making process. Involvement is an important concept relating to consumer decision making as it is a prerequisite of all decision making (Beatty *et al*, 1988). Involvement is the psychological instigator of the decision making process and relates to the level of concern that a consumer attaches to a purchase decision such as destination choice. With regards to consumer behaviour, the discussion on the concept of involvement often

[2] Overall Risk = probability of negative consequences x importance of negative consequences
[3] Overall Perceived Risk (OPR) = Product Category Risk (PCR) + Product Specific Risk (PSR). Where PCR = F1 (individual level variables, attributes of the product class) and PSR = F2 (purchase goals, purchase situation, specific product attributes)

focuses on the level of interest, importance and emotion attached to a certain decision. For example, Day (1970) defined involvement as 'the general level of interest in the object or the centrality of the object to the person's ego-structure'. More recently Havitz and Dimanche (1999) advanced a definition that summarised involvement as 'an unobservable state of motivation, arousal or interest toward a recreational activity or associated product'. By comparison, Cohen's (1988) definition is also useful to identify as it appears to be more implicit about the fact that involvement can trigger a physical response as well as a psychological one; Cohen states that involvement can be viewed as someone's activation level at a particular moment in time.

Early investigation into the concept of involvement centred on the concept product importance (Hupfer and Gardner, 1971; Lastovicka and Gardner, 1977) which established a link between the level of importance of a product (such as a car or a holiday destination) and the subsequent level of involvement of the consumer. It must be said, however, that products have a degree of importance at all levels of the hierarchy of needs (Maslow, 1943) from the need for biological and physiological requisites such as water and food through to commodities that support or develop self-actualisation such as educational courses. Hupfner and Gardner (1971) explain that a product that is purchased to boost a person's self-esteem might be considered equally as important to an individual as one that improves their security and so the hierarchy of needs should not be applied in parallel to increasing levels of involvement. Hupfner and Gardner's (1971) model of importance/involvement merely claims that a positive correlation exists between levels of importance of a product and the level of involvement of the consumer.

This initial rationalisation proposed by Hupfner and Gardner (1971) has since faced criticism (Mittal, 1989) due to the fact that some essential products such as petrol may not evoke high levels of involvement (i.e. arousal, interest etc.) when purchased or consumed whereas relatively trivial products such as rental movies may evoke high levels of involvement. The common inclusion of terms such as 'arousal' and 'interest' within definitions (e.g. Havitz and Dimanche, 1999; Cohen, 1988) of involvement seem to support this criticism.

In order to overcome this criticism, Houston and Rothschild (1978) identified two categories of involvement which have been widely accepted (Richins and Bloch, 1992); enduring involvement and situational involvement. Enduring involvement is said to exist when an emotional connection with

the product has been established over time and is likely to continue (in the context of this research, holidays are the 'product' in question) whereas situational involvement is considered to be a temporarily increased level of interest or concern for a decision. Enduring involvement has also been called 'ego involvement' by some authors. Beatty *et al* (1988), for example, state their preference for the term 'ego involvement' on the basis that it indicates the source of the involvement and the reason for the endurance. Sherif *et al*, (1965) describe ego as the constellation of attitudes that form towards objects, persons, situations and groups. When any stimulus is related to the domain of ego, ego involvement is said to exist and when an object becomes important to an individual's ego, an enduring involvement is formed.

O'Cass (2000, p. 549) argues that involvement should always be conceptualised as enduring in nature and that 'characteristics of the environment and temporary situational changes encountered by the consumer do not directly produce changes in or affect involvement levels'. Changes in the level of involvement are said to occur only as the individual's relevant value system changes as a result of interaction with a stimulus or an environmental factor. As an individual's value system may be considered resilient and long-lasting, so therefore should involvement. O'Cass (2000, p. 550) acknowledges the existence of short term, or 'situational' involvement, but emphasises that 'these variables can and will periodically fluctuate from base level, but overall involvement should be treated as a relatively stable individual difference variable'. Although O'Cass's interpretation of involvement appears to support the dominance of enduring involvement and almost neglect the existence of situational involvement, it is a truism for one particular type of involvement; product involvement.

Product involvement is analogous to the concept of ego involvement (Warrington and Shim, 2000) and therefore is enduring in nature. According to Bian and Moutinho (2008), product involvement is commonly defined as a consumer's enduring perceptions of the importance of the product category based on the consumer's inherent needs, values, and interests. Product involvement occurs when a product category is related to a person's centrally held values or beliefs and has been extensively researched under the guise of brand loyalty. While in this context, holidays are the product, a preference for a destination (such as Spain, or Barcelona) that results in repeat visitation represents loyalty. Whist supporting the theory that product involvement is akin to ego involvement, Warrington and Shim (2000, p. 763) argue that 'product involvement can be either situational or

enduring based upon [its] persistence'. It is possible for a product that would normally be of little interest to a consumer to become important temporarily due to situational conditions. For example, the attractions at specific tourist destinations will rarely be an urgent concern to an individual, however, when choosing between these destinations, the level of interest in the attributes of each alternative will induce involvement. This involvement with the destination will only be temporary as once the holiday is over, it will return to normal, negligible levels.

The construct of product involvement appears to employ Hupfer and Gardner's (1971) and Lastovicka and Gardner's (1977) early proposition that involvement with an object is dependent on its level of importance to the individual. If the product is deemed important to the consumer's ego structure, i.e. if holidays are considered an important part of a contented life, the associated involvement can be categorised as enduring. If the product is only of temporary importance, then the consumer displays situational involvement. The inclusion of the concept of situational involvement may help to alleviate the concern with the importance/involvement correlation theory by explaining that even though essential products such as petrol may not adhere to the definitions of involvement pertaining to the arousal of a person's ego structure, a temporary increase in interest and activation does exist when it must be purchased. This introduces the important distinction that many authors (Beatty *et al*, 1988; Mittal and Lee, 1989; Sirakaya and Woodside, 2004) have made between product (or enduring or ego) involvement and purchase decision involvement.

2.2.2.2 Purchase Decision Involvement

Mittal (1989, p. 150) defines purchase decision involvement as 'the extent of interest and concern that a consumer brings to bear on a purchase decision task'. Beatty *et al* (1988, p. 150) define purchase involvement as 'the level of concern, or interest in, the purchase process triggered by the need to consider a particular purchase'. Purchase decision involvement can be conceptualised as a high-low continuum where low purchase decision involvement represents a casual selection of products and high purchase decision involvement implies a rigorous appraisal of options faced by the consumer. Product and purchase involvement are two distinctly separate (but not mutually exclusive) forms of involvement, the former relating to the consumers' perceptions of a product and its interaction with their values and beliefs whereas the latter concerns their requirement for, and interest in, the actual purchase decision making process. Some authors (e.g. Houston and Rothschild,

1978) explain that product involvement arises from factors internal to the consumer whilst purchase decision involvement arises from external factors.

Although separate types of involvement, product involvement and purchase decision involvement are often linked in consumer behaviour research. If a consumer has a high level of product involvement, say for holidays for example, the importance of choosing one that is compliant with their ego structure will induce a high level of purchase decision involvement. Product involvement, therefore, is commonly a precursor for purchase decision involvement. However, purchase decision involvement can occur without the existence of product involvement and some authors (e.g. Richins and Bloch, 1992) state that most involvement responses are exclusively outcomes of purchase decision involvement and product involvement does not apply. Mittal and Lee (1989) use canned peas to illustrate this point; it is unlikely that canned peas stimulate an arousal in a consumers ego structure therefore the level of involvement with this product class is low. However, at the point of decision making between the different options available, variables such as price and nutritional value may incite high purchase decision involvement. Extensive involvement responses, where product involvement and purchase decision involvement combine are rare as most consumer products do not elicit enduring product involvement. The only time that many products such as canned peas and air travel do elicit an involvement response is during the decision making process and so the research agenda moved from involvement theory in the 70's and 80's to the consumer decision making process in the 90's and 00's.

2.2.3 Types of Decision Making

Involvement theory is often applied to decision making research as it engenders the creation of decision making typologies as decision making can be categorised depending on the level of purchase involvement. Hawkins *et al* (2007) identify three levels of involvement that are manifested as three types of decision making; 'nominal decision making', 'limited decision making' and 'extended decision making'. Hyde (2008) develops the concept by dividing the 'nominal decision making' category in two and concludes that the four types of decision making can be categorised as Inertia, Brand Loyal Purchases, Limited decision making and Extended decision making. Inertia is where consumers choose not to expend time or effort investigating all of the attributes of an alternative; they merely continue to make repeat purchases of the same product. The repeat

purchase of a particular type of milk (e.g. semi skimmed) can illustrate this low level of involvement in the purchase decision making process. Brand loyal purchase is where again, the process is curtailed due to a satisfactory outcome of a previous, often extended decision making process. Brand loyalty differs from Inertia as a degree of involvement has been established with the particular brand within a product class, which implies that alternative products carrying the brand may be substituted. Brand loyalty towards Hilton Hotels may be an example and when travellers are staying in different cities, they may remain loyal to the Hilton brand. Whilst interesting to marketers researching the concept and construct of brand loyalty, the two types of decision making above are not useful when investigating decision making processes actuated at the point of purchase as many of the cognitive processes that result in these decisions have taken place significantly before the point of purchase.

The next category of decision making discussed by Hawkins *et al* (2007) and Hyde (2008) is where external influences begin to affect the process. Limited decision making is where the purchase decision making process exists in a simple format. This may be because of a lack of prior knowledge or established loyalty, but also because the potential for negative outcomes does not outweigh the time required to investigate the various options available extensively. Limited decision making may also occur because of the limited number of options or attributes available for consideration. Extended decision making is where there is a considerable amount of time and effort invested in identifying the optimal product or service to purchase and this is the focus of many authors researching the consumer decision making process (e.g. Jacobsen and Munar, 2012; Moore *et al*, 2012; Xiang *et al*, 2014).

2.2.4 Motivation and Information Search

2.2.4.1 Involvement and Motivation for Information Search

Motivation to conduct information search prior to a purchase decision will initially be driven by a decision makers' level of involvement. As stated in section 2.2.2, most consumer products do not simultaneously elicit *enduring* (brand or product category) and *purchase decision* involvement for two reasons. Firstly, most products do not attach themselves to a person's constitutive values or goals and therefore do not inspire them to engage at any significant level with information

searching. Secondly, many purchase decisions do not require a detailed examination of the various alternatives and the attributes of each because they may be low value products, routine purchases, or the relevant information is simple to assimilate.

Products such as holidays do inspire high levels of enduring and purchase decision involvement as tourism products are often non routine, high value, complex products of which there are many alternatives. The construct of involvement implies that there is necessarily a motivation to engage with information search, indeed involvements' 'typical consequences are particular types of search, information processing and decision making whereby high involvement implies a high intensity in search process' (Maser and Weiermair, 1998, p. 110). Whilst stating that tourists are high involvement consumers Maser and Weiermair (1998) state that this necessarily implies that some level of risk exists due to the availability of choice alternatives. The results of their research on traveller decision making found that the inseparable psychological phenomena of risk and involvement motivate information search with the goal of reducing uncertainty and therefore identifying and avoiding choice alternatives with unacceptable levels of risk. Fodness and Murray (1997) support this conclusion by stating that in the context of tourism the primary benefit motivating the search for information is 'to enhance the quality of their trip by decreasing the level of uncertainty' (Fodness and Murray, 1997, p. 505).

A tourists' motivation to actively engage in information search is parallel to the issues of risk and involvement; indeed involvement has been defined as 'a state of motivation, arousal or interest' (Cai *et al*, 2003, p. 140). The motivation for information search can be introduced by using a simple binary argument; either there is enough motivation to search for information or there isn't. However, motivation for information search has also been widely researched in terms of its effect on the *extent* of information search (e.g. Maser and Weiermair, 1998; Sirakaya and Woodside, 2005). Research on the extent of information search can be traced back to Stigler's (1961) theory of the economics of information which states that the extent of information search is limited to a certain point where the cost of the search outweighs the benefits; this theory has been supported more recently by Zander and Hamm (2012). The costs associated with external information search are the effort required, the time spent or the financial cost (Vogt and Fessenmaier, 1998). Effort is commonly associated with the cognitive processes that are required to retrieve, process and evaluate information but authors such as Avery (1996) and Payne (1982) also suggest that cognitive

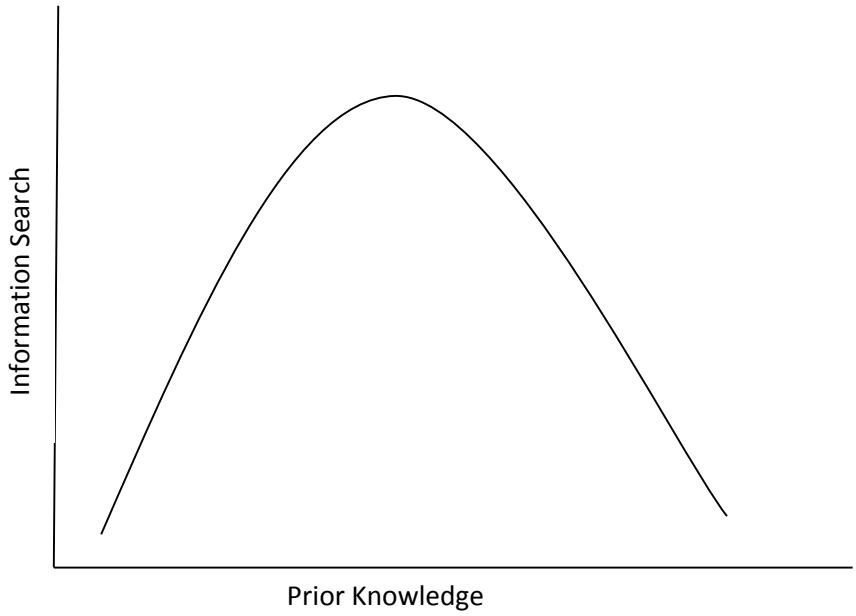
effort is also wisely spent by the consumer in the selection and application of the appropriate search strategy. The financial cost of information search has been summarised by Gursoy and McCleary (2004) as the cost of telephone calls, postage, faxing and transportation to information sources such as travel agents or libraries. According to Stigler (1961) time is the most important external cost. This cost, however, varies from individual to individual based on the opportunity cost of their time, which itself has been said to depend on personal circumstances such as income or free time (Bryant, 1988). The benefits of information search largely relate to the reduction of risk associated with purchase decisions (Gursoy and McCleary, 2004; McCleary and Whitney, 1994), but risk, as has been discussed previously, is a subjective concept dependent on many personal variables such as prior knowledge, cultural background and, initially, a persons' level of involvement in the product or purchase in question which serves to amplify risk.

It is difficult to prescribe numerically the extent of information search conducted for any given decision making context because the cost/benefit valuation will be subject to each individual's own valuation systems. The problem relates back to the subjectivity of costs and benefits and therefore, to involvement. It may be argued that a positive correlation exists between the extent of information search and the level of involvement as the higher the involvement (itself positively correlated to the motivation to avoid risk) the greater the extent of information search. However, findings from research (Beatty and Smith, 1987; Newman, 1977; Wickie and Dickson, 1985) relevant to this argument appear to suggest that this is not the case. Moorthy et al (1997) stated that empirical findings show that consumers can demonstrate 'very limited pre-purchase information search activity' even in 'high involvement situations'. These findings appear to contradict logic and the prescribed theory on information search which states that the higher the level of involvement and risk, the greater the extent of information search. However, the many variables within the problem setting have provided ample opportunity for researchers to investigate this anomaly and draw conclusions as to why the extent of information search may be different for a specific purchase context such as the purchase of a family holiday. One conclusion, based on empirical evidence is that prior knowledge has a significant impact on the extent of information search (Moorthy et al, 1997).

2.2.4.2 Prior Knowledge

Authors such as Moorthy et al (1997) and Johnson and Russo (1984) researched the impact of prior knowledge on motivation for information search and stated that the relationship can be described as an inverted U-curve (Figure 1). Decision makers with no prior knowledge of a product or product class will not be motivated to examine the relevant information relating to it as they have no awareness of it. Consumers with perfect knowledge of a product or product class will also not be motivated to engage in information search as there is no value in doing so. Between these two extremes consumers have enough knowledge to make them aware of the product, but still search for more to improve their decision making process and ultimate choice.

Figure 1; the Inverted U Curve



Source: Russo (1984)

Alba and Hutchinson (1987), develop the field of understanding on the decision making process and the effect of prior knowledge (and the semantic terminology) by identifying that 'consumer knowledge has two major components; familiarity and expertise'[4] (Alba and Hutchinson, 1987, p.

[4] Expertise has been attributed five characteristics; (1) ability to analyse information, focusing on the relevant and ignoring the irrelevant, (2) reduced cognitive effort required to perform the task, (3)

411). Both familiarity and expertise refer to the product/product class as well as the decision making process and familiarity breeds expertise in both. Greater familiarity with a certain product (such as a destination) or with a problem setting (such as deciding between destinations) creates greater expertise, which Alba and Hutchinson (1987, p. 411) defined as 'the ability to perform product related tasks successfully'.

Familiarity and expertise relating to a given decision task provides a richer, more veridical understanding of the alternatives as well an established pattern of problem solving which in turn aids the automation (defined by Alba and Hutchinson (1987, p. 413) as 'a process that can be performed with minimal effort') of some elements of the decision making process and reducing the need for information search. The higher the levels of familiarity and expertise, the less complex a decision can become to the consumer due to the learned ability for the consumer to group, categorise and ultimately eliminate certain choice alternatives based on a prior knowledge of the product attributes. This ability facilitates the adoption of specific decision making strategies and avoids the need for more time consuming, costly and complex information search behaviour. A tourist wishing to travel from London to Manchester, for example, may automatically choose an train as their means of transport over cars or aeroplanes as it is perceived to be the most practical for travelling such a distance. The extent of information search on travel options is therefore already reduced due to these exclusions. Theoretically, as experience of the journey increases, familiarity, expertise and knowledge also increase up to the point where no search for information is required as illustrated in Figure 1.

Fodness and Murray (1999) conducted research which explicitly relates the concept of prior knowledge to tourist destination information search and supports the conclusions made by Alba and Hutchinson (1987), Moorthy et al (1997) and Johnson and Russo (1984). They assert that for trips to familiar destinations, visiting friends and relatives for example, 'previsit (prepurchase) information search is probably unnecessary if past experiences provide an adequate basis for decision making' (Fodness and Murray, 1999, p. 222). Where the traveller plans variations to regular behaviour which results in some level of unfamiliarity, moderate information search is required. The authors continue

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increased ability to remember product information, (4) increased ability to explain or elaborate on the products attributes, beyond those presented to the consumer and (5) more refined, more complete, more veridical cognitive structures.

to state that the perceived risks associated with unfamiliar trips will motivate destination decision makers to engage in extensive information search and an extensive decision making process.

Whilst prior knowledge will clearly be a strong influence on the nature of information search, it will not be a universal constant, i.e. the same level of prior knowledge will not equate to a set amount of information search amongst decision makers. The differences in the characteristics of decision makers will have a significant impact on the motivational element of information search and much research has been conducted as a result of this.

2.2.5 Summary

Motivation for the decision making process is aroused by the existence of choice alternatives that have different attributes; where this is the case, risk exists. Risk is a significant factor in the choice of holiday destinations due to the combination of uncertainty surrounding the product as well as the relatively elevated potential for severely negative consequences. As a result, purchase decision involvement motivates the destination decision maker to engage in an extended decision making process taking place which includes a relatively extensive search for information amongst the different sources available.

2.3 Spatial Aspect of Information Search

One salient area of research present in literature on consumer decision making is the information search behaviour displayed by the consumer (Nolan, 1976; Gitelson and Crompton, 1983; Snepenger, 1990; Fodness and Murray, 1998; Chen and Gursoy, 2000; Biegler, 2004; Dey and Sarma, 2004). It is of such fundamental importance, that Assael (1987) goes as far as asserting that information can be treated as one of the most or even the most important factor influencing and determining consumer behaviour. The reams of literature on consumer search patterns serves to emphasise its centrality to consumer decision making, its complexity and its evolving nature. Additionally, its importance to the marketing strategies of organisations is also a strong influence driving research.

2.3.1 Classifications of Information Sources

The spatial element of information search has attracted the interested of many researchers (Money and Crotts, 2003; Lee *et al*, 2007; Sharifpour *et al*, 2014) because, according to Rosenbloom, Larsen and Smith (2004, p. 4) 'it has become too difficult to hold on to a competitive edge via product, pricing and promotional strategies… almost by process of elimination, channel strategy has become fashionable'. Many authors (e.g. Engel, Blackwell and Miniard, 1990; Pan and Fesenmaier, 2006; Ramkisson and Nunkoo, 2012) researching information sources agree that the first fundamental distinction between information sources can be made between internal and external sources. Internal information sources such as memory and emotional responses are the domain of psychology researchers, whereas marketing organisations have particular interest in the external sources. Molina and Esteban (2006) provide a useful discussion on the impact of specific external information sources on destination choice. While their research is limited to travel brochures, they state that the image of a destination can be formed over a lifetime through various channels such as friends and relatives, television programmes, travel guides and brochures. Molina and Esteban (2006) also established that the numerous variables attributable to each source (message content, detail, information source credibility etc.) play an important role in the image formation of destinations which in turn affects destination choice. The importance of understanding the differing effects of the various information sources is of vital concern to researchers and marketing practitioners. For example, in their research on tourists' information search behaviour, Gursoy and McCleary (2004, p. 397) concluded that 'understanding external source utilisation can help marketers effectively tailor their promotional mix' and 'can help marketing managers design better marketing programmes and communication strategies'.

The prescribed range of sources available to the tourist who is making a purchase decision varies from author to author. Appendix 1 presents some of the more recent classifications of information sources used in salient research which range from 5 to 18 possible outlets and a summary classification of salient sources is below:

- Broadcast media (TV and radio)
- Printed media (newspapers, magazines, travel brochures and billboards)
- Friends and relatives
- Direct communication (airline, hotel, tour operator, attraction)
- Local tourism board
- High street travel agent

- High street travel agents' web site
- Online only travel agent (expedia/opodo etc.)
- Printed travel guides
- Travel guides online
- Independent traveller review sites and forums (Tripadvisor, Wikitravel etc.)

One generalised grouping of these external sources is personal and non-personal (Dawar, Parker and Price, 1996), however, a consensus does not exist regarding the precise characteristics of these categories and this is essential to clearly define what is meant by this in any individual piece of research. Personal information sources are herein interpreted as those which a person generates information for the decision maker in response to their enquiry. The information originating from these sources is considered personal as it is generated to provide information which is adapted to fulfil decision makers' individual information requirements. They are characterised by conversations which take place face to face, over the phone or via email or other digital messaging systems. Non-personal information sources are characterised by information that exists independently of enquiry and is identical for everyone. Broadcast and printed media exemplify this type of information. Booking systems (such as those for hotels or flights) which generate information in response to a decision maker's enquiry may also be considered a non-personal source as the information returned is automated and is there is no human interaction involved.

Beritelli *et al* (2007) divide the information sources into neutral and non-neutral and cite Lo et al (2002) as stating that neutral sources such as independent traveller review sites or printed travel guides are significantly more influential to leisure travellers than non-neutral sources such as outlets created by the local tourism board. In a similar sense, Pan and Fesenmaier (2006) divide the information sources into marketing dominated and non-marketing dominated, the former being driven by a need to persuade travellers and to encourage purchases in the same way that non neutral sources do. The latter merely provides information to help decision makers to make a rational decision which serves the same purpose as Beritelli *et al*'s (2007) neutral sources. Money and Crotts (2003) applied a mix of the classifications and stated that the information sources available to tourists can be thought of as either marketer dominated, neutral or personal and the terminology is applied in the same purpose as other authors (Beritelli, *et al*, 2007; Pan and Fessenmaier, 2006). In addition, Money and Crotts (2003) identified direct contact with the retailer, in this case the local tourist board, as a distinct information source, and this source is included in this research.

Fodness and Murray (1997) created a source matrix (Table 1) which divided the sources used in their research based on the two emergent characteristics of the salient research (commercial or non-commercial and personal or non-personal).

Table 1; Classification of tourist information sources

	Non-personal	Personal
Commercial	Brochures Guide Books Local Tourist Offices State Travel Guides	Auto Clubs Travel Agents
Non-commercial	Magazines Newspapers	Friends and Relatives Highway Welcome Centers Personal Experience

Source: Fodness and Murray (1997, p. 506)

The quality and type of information provided by each category has been shown to be perceived differently by consumers. Non-personal sources such as TV adverts or travel guides for example will serve to provide a generalised image of a destination for a broad target market, whereas personal sources tailor their information to the individual's tastes. Fodness and Murray (1997) also found that personal sources, and specifically friends and relatives are strong influences on tourists during passive information gathering stage of image formation. Commercial and non-commercial sources will also be perceived differently by the tourist; because commercial sources have a vested interest in selling services of a particular destination, 'the marketer dominated [commercial] information would hold less credibility and hence contain more risk' (Money and Crotts, 2003, p. 195). Understanding the consumers' perception and use of each type of information is critical to marketing organisations.

Traditional (i.e. offline) information sources are easy to classify (see Table 1) as information regarding price and availability of transport and accommodation can be obtained through direct communication with a sales representative. However, the maturation of the internet increasingly gives vacation decision makers access to sources of information which combined generic, pre-existing information as well as reactively generated information relating to price and availability of travel elements. The distinction between personal and non-personal information sources therefore becomes blurred. In response to this development, it may be useful to identify an additional variation in information characteristics that has already been mentioned; active and passive

information sources. Many authors on information search strategies (Schull and Crompton, 1983; Fodness and Murray, 1997; Chen and Gursoy, 2000; Schweda and Varan, 2003) differentiate between people who actively engage in information searching and those who allow information to come to them passively. Passive information sources may be those which are presented to the tourist without them engaging in the search for it. Mass media such as broadcast and printed adverts are examples, as are friends and relatives (Fodness and Murray, 1997). Active information sources are those which require the consumer to expend resources such as time, money or energy to collect. Specific flight or accommodation prices or destination attractions may be researched by the tourist actively and travel agents are a traditional example of an active source (Fodness and Murray, 1997). Active and passive information sources can also be divided into commercial and non-commercial and personal or non-personal. The matrix shown in Table 1 can therefore be imagined as cubic with two categories on each dimension – Personal/Non-personal, Commercial/Non Commercial and Active/Passive. The distinction between passive and active sources of information is valuable when analysing the stages of the decision making process.

2.3.2 Benefits of Different Spatial Sources

Research relating to the information sources used during the decision making process has been problematic due to the ever more diverse nature of the information environment. In 1997, Fodness and Murray criticised extant literature for 'the limited number of information sources examined [and] the exclusion of "messy" behaviours (i.e. the use of multiple information sources) from consideration' (Fodness and Murray, 1997, p. 507). According to Beritelli *et al* (2007), this is still a priority of tourism research. The problem can be seen in various articles on tourist information sources, some of which do not include the internet as a source of information at all (Fodness and Murray, 1997), some contain the internet as a single reference (Chen and Gursoy, 2000; Lo, Cheung and Law, 2002; Bieger and Laesser, 2004; Kim, Hwang and Fessenmaier, 2005), while others divide internet sources further depending on information provider (Quintal *et al*, 2010; Choi *et al*, 2012) or information purpose (Lee, Soutar and Daly, 2007). A longitudinal comparison of studies is problematic due to the evolving nature of the information environment, especially since the proliferation of the internet. The growing importance of the internet as an information source can be seen through the results of research conducted over the last 15 years; 5% of people were using the internet as a source of tourism information in 2000 (Chen and Gursoy, 2000), this number rose

to 20% by 2006 (Xie *et al*, 2006), 48% by 2010 (Quintal *et al*, 2010) and 68% in 2013 (Sparks *et al*, 2013).

The research demonstrates that the internet has become a prominent information source, but not a dominant one. Traditional information sources such as travel agents, brochures and TV adverts are still important inclusions of any study as different sources have different benefits to both tourists and marketers. Chen and Gursoy (2000), for example, found that 59% of people use travel agents as an information source for holiday decision making; findings in 2010 by Quintal *et al* still showed this figure was as high as 52%.

The different information sources available to destination decision makers have long been targeted by marketing managers to create different cognitive and behavioural responses, often more than one source is used synergistically to encourage a specific purchase reaction. Kim *et al* (2005) provide an overview of the effectiveness of advertising tourism through passive media channels (they exclude friends and relatives as this information is not under marketer's control) and take a long term view of the effectiveness, rather than looking at short term conversion rates. They argue that advertising can create an awareness of a destination which may not be acted upon immediately, but may still be a positive influence on destination choice in the long term future.

Kim *et al* (2005) distinguished between broadcast and printed sources by stating that broadcast induces low involvement but relatively high emotional responses whereas printed sources induce high involvement and relatively high rational responses. Nylan (1986) identified the characteristics of broadcast media as passive and indiscriminate. The duration of the advert is out of the control of the viewer, giving them no opportunity to review the message. In contrast, print media such as newspaper and magazine adverts can be viewed for as long and as many times as the reader chooses 'creating a more comfortable learning environment whereby information can be more easily absorbed and integrated' (Kim *et al* 2005, p. 44). This is especially true of magazine adverts which have additional benefits of being longer lasting than those placed in daily newspapers and are also said to be more stimulating due to glossy colour pages. Print media can also be more discriminate than broadcast media due to the focused specialisation of specific publications. According to Kim *et al* (2005), broadcast media such as TV and radio is a more effective medium for quick messages whereas print media allows consumers to compare details and form a comparatively

rational opinion and can therefore be more persuasive. Enhancing this power of persuasion is evidence which shows that adverts placed in more credible media such as newspapers are considered more trustworthy than those broadcast on TV (Bauer and Greyser, 1968; Larkin, 1979 in Kim *et al* 2005).

Although broadcast media appear to have many disadvantages when compared to print media, there is potential within this medium to communicate messages more effectively than print media. According to Luecke (2003) combining verbal and visual information through TV adverts is a more powerful method of advertising communication which creates a more enduring image within a person's long term memory. A model which emphasises the importance of creating cognizance amongst consumers was put forward by Siegel and Ziff-Levine in 1990. According to their Advertising Tracking Model, 'the main goals of the advertising campaign are to: (1) generate advertising awareness among the target audience; (2) generate awareness of the destination as a place to visit; i.e., get it on the shopping list of acceptable destinations; (3) create a positive image of the destination *vis-a-vis* its competitors; (4) motivate consumers to travel to the destination in the near future, through (2) and (3) above; and (5) influence travel behaviour by converting those motivated by advertising to actually visit the destination' (Siegel and Ziff-Levine, 1990, p. 52). Both of the commercially controlled passive sources of information (print and broadcast) have the power to create awareness, and a positive, persuasive image of a destination within a tourist's memory before the tourist engages in active, external information search, thus supposedly influencing the early stages of the consumer decision making process where tourists create a mental list of known alternatives.

Stienmetz and Fesenmaier (2014), however, conducted research on 5,472 American travellers to find the impact of adverts presented through different channels on tourism decisions. Their results found that neither adverts on TV/radio or in newspapers/magazines had a significant effect on destination choice. Furthermore, as with most contemporary research on tourist information search, their list of information sources also included internet adverts (using the internet as a single source) and 'other' adverts; still no significant influence was found on destination choice. This research is interesting and argued to be valid and reliable by the authors, no further research has been conducted to challenge these findings[5].

[5] 04/2016

2.3.3 The Virtual Spatial Context

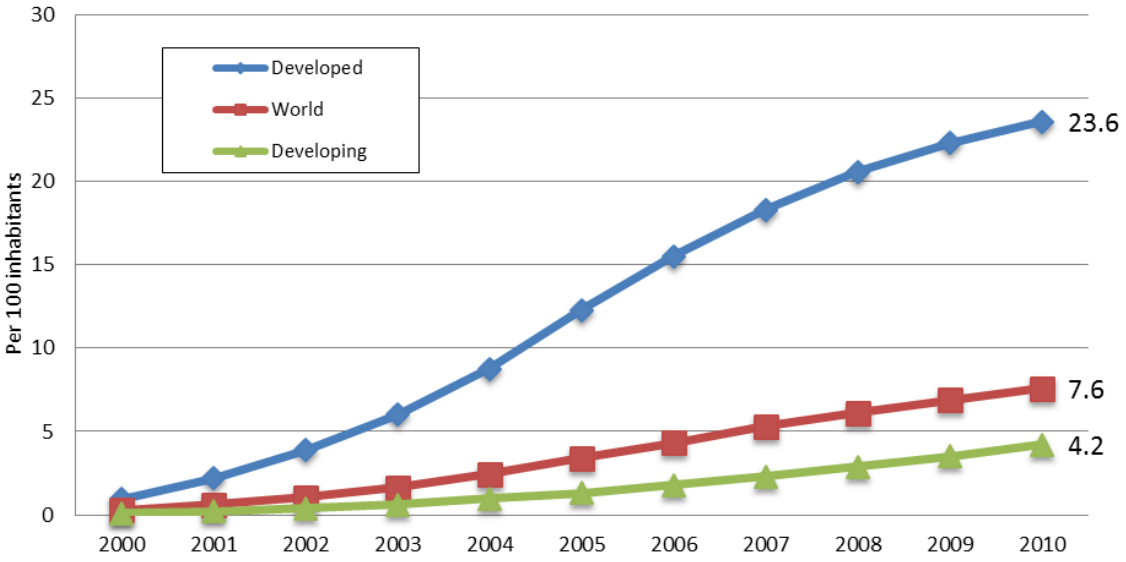
It is widely known that information communication technologies (ICT's) have a considerable and increasing impact on the tourism industry, both on the supply and demand side (Jacobsen and Munar, 2012) but before discussing the contemporary role of the internet in the tourist destination decision making process, it is useful to provide a brief overview of the developments which have created the modern information environment. Since the creation of the World Wide Web in 1990 there have been two major developments which have had significant impacts on the information available to consumers. Firstly, the number of fixed wired broadband subscriptions have increased significantly since 2000, especially in the developed world as shown in Figure 2[6]. The significance of broadband is that web sites can now contain richer information such as images and videos to provide a clearer picture to the consumer of the item that they are considering for purchase. In the tourism industry this is of particular value due to the inability for the consumer to experience vacation elements such as accommodation before the purchase decision. This enhanced representation of vacation elements helps to narrow the gap between expectations and the actual performance, thus reducing the performance risk associated with destination decision making. The outcome of this improved content was demonstrated in a 2011 study by Internet Retailer who found that 'visitors who view product videos are 85% more likely to buy than visitors who do not'. Think Insights (2011) identified that 46% of leisure travellers use online travel related videos in the travel decision making process (an increase from 36% in 2009) and that they are used during all phases of trip planning.

The second significant development in the WWW occurred during 2004/2005 with the introduction of 'Web 2.0' which may be thought of as a reorientation of the WWW. The philosophy of Web 2.0 was to create a more dynamic communication experience between web site publishers and end users by allowing the public to edit and upload content onto web pages freely and therefore become more involved and responsible for the information that is available. The significance of this development should not be underestimated as it has revolutionised communications through the explosion of social media (which is not limited to web sites such as Facebook). TripAdvisor and WikiTravel are two extremely powerful sources of tourist information born of the Web 2.0

[6] This figure also shows that 'fixed (wired) broadband growth in developed countries is slowing' (ITU, 2012), meaning that this variable in information source research is stabilising, which is beneficial to research validity.

development and are examples of reviews and opinions published by consumers that have had a major impact on the tourism sector (Tan and Chen, 2012).

Figure 2; Global Fixed Wired Broadband Subscriptions.



Source; ITU World Telecommunications/ICT Indicators Database, 2011

2.3.4 The Impact of the Internet on Search Behaviour

Partly due to the nature and recency of the developments in the WWW, the scholarly research agenda appears to be still catching up with the modern information environment and has been described as predominantly exploratory in nature (Jacobsen and Munar, 2012). Regardless of this, the evidence from research that has been conducted describes fundamental changes not only in the spatial dimension of information search, but also in consumer behaviour and the relationship and power balance between consumers and the suppliers. The increased, indeed universal accessibility of information has given consumers the ability to collect more details on the attributes of choice alternatives without needing to engage with commercial tourist information sources; it has also created greater price transparency (Jacobsen and Munar, 2012). These benefits have drawn consumers towards the internet to such extent that it 'is already involved in 85% of all vacation purchases' (Cinchmarketing, 2011). This new level of information available to and used by consumers has led some authors (e.g. Constantinides and Fountain, 2008) to claim that the power in

the marketplace has now migrated from the supplier to the customers thus re-emphasising the importance of adopting the optimal information channel strategy.

Research conducted by Think Insights (2011) identified that the internet has overtaken word of mouth communication as the leading source of travel planning information (85% and 60% usage respectively), and that the internet is also the leading source used throughout 'the purchase funnel' (the three stage decision making process model applied by Think Insight where sources (i) helped me learn more, (ii) provided information to help me decide and (iii) prompted me to book). The increased accessibility of information is a major factor in the adoption of the internet in the consumer decision making process, but a concurrent development was the diversification of information sources within the internet which has contributed significantly to the migration of information search to the internet. Zins (2009, p. 468) states that the range of information sources online have 'diversified more or less parallel to traditional information channels' and advocates the continuation of the commercial/non-commercial and personal/non-personal system of classification. Commercial operators such as travel agents have created an online presence, many in conjunction to their high street operations and personal and non-personal information is also available via the internet. The type of information that has demonstrated exponential growth in volume and influence is non-commercial, specifically through social media and user generated content (Jacobsen and Munar, 2012) as 'consumers are becoming disengaged by one way dialogues' (Morgan *et al*, 2012, p. 76) and prefer to be more active participants in the information environment. The enthusiasm of tourists to upload independent reviews of vacation elements can easily be demonstrated; as of March 2016 New York as a destination has over 2.3 million[7] reviews on TripAdvisor. Evidence also exists to support Morgan *et al*'s (2012, p. 76) statement that tourists have 'evolved from brochure requesters to web researchers' and that tourists are not only uploading reviews but engaging with them during the decision making process. According to a study conducted by Deloitte and Touche (2007), 62% of consumers read user generated reviews, 98% found the reviews to be reliable.

The results of Xiang and Gretzel's (2010) research on the significance of social media on travel information search found that 11% of web sites relating to travel planning related to social media sites. Mauri and Minazi (2013) found that both purchase decision and expectation levels were

[7] 2,355,856; 29/03/2016

positively correlated to the valance of the travel reviewer, however, the presence of replies by hotel managers were perceived negatively. Research on the impact of travel sites such as TripAdvisor has clearly demonstrated that exposure the third party reviews will increase the probability of consumers making a booking. Vermuelen and Seegers (2009) found that positive reviews increase the probability of the decision maker booking the subject of the review (in the case of their research, hotels). This result was predictable, however, they also found that the detrimental effect of bad reviews on the decision makers' perception of the hotel are offset by an increase in levels of awareness resulting in a 'near neutral effect on consideration' (Vermuelen and Seegers, 2009, p. 126).

It is interesting to consider whether the proliferation of Web 2.0 and user generated content was responsible for a change in the consumers' perspective of trustworthy sources, or whether the perspective change occurred before Web 2.0 and was a driving force for the popularity of 'digital word of mouth' sources. A study conducted by Yankelovick Monitor (a prominent research company that tracks social trends) in 2004 concluded that '60% of US consumers have a much more negative picture about marketing and that 70% of consumers tune out advertising much more often than a few years ago' implying that the changes were occurring before the expansion of user generated content. Regardless of which came first or if they occurred simultaneously, contemporary empirical research has shown that destination decision makers do access and are influenced by independent online reviews (O'Connor, 2008; Xiang *et al*, 2015).

2.3.5 The Impact of the Internet on Purchase Behaviour

In addition to information search behaviour, purchase behaviour is another critical aspect of tourist consumer behaviour that has changed as a result of the development of the internet which has become a point of sale for many companies in the tourism industry. During the period 2000 to 2009, the number of purchases of travel products made online increased by 250% (Pew Foundation Internet Project, 2009). Numerous pieces of research have been presented demonstrating that many travel purchases now take place online; 75.3% of respondents in Park et al's (2011) study were found to make an online purchase and 95% of the respondents in Jacobsen and Munar's (2012) research said that they had bought some aspect of their trip online.

Regarding the specific items that have been found to be purchased online, Park *et al* (2011) found that a strong hierarchical structure exists. For travellers who purchased only one travel related item online, that purchase was either the flight or accommodation. Travellers who purchased two items online bought either flights *or* accommodation and then event tickets or car rental. For travellers purchasing more than two travel related items online, accommodation *and* flight tickets were purchased by 'virtually everyone' (Park *et al*, 2011, p. 414). This demonstrates that flights and accommodation are the main items bought online and the reason for this is because they are considered 'standardised transactional service products such that travellers do not need much information about and thus consider them 'low risk' products' (Park et al 2011, p. 403). The results of this study also demonstrate the decomposed nature of travel purchases in the modern environment. As stated by Buhalis and Law (2008, p. 611) 'package tours are losing market share in favour of independently organised tourism'. This can be explained by the fact that the internet has enabled tourists to create their own packages to suit their individual tastes and requirements (Daniele and Frew, 2005).

Of the tourists who do make online purchases, Park et al (2011) also identified significant demographic characteristics. According to their research, tourists who purchased 1 – 2 products (core internet travellers) or 3 – 5 products (advanced internet travellers) online were of a similar age (30 – 49), similar income ($50,000 - $99,000) but the advanced internet travellers group had a higher average level of education. 'Comprehensive internet travellers', the travellers who purchased more than 5 travel related products online, differed in that they were, on average, younger (22 – 39), higher earners ($75,000 - $150,000) and shared a higher level of education with advanced internet travellers who purchased 3 – 5 products online. Although this difference is significant to decision making's and other organisations in the travel and hospitality sector, it must be said that the comprehensive internet travellers group only made up 6.9% of the population (Park et al, 2011). Advanced internet travellers represented 33.5% of the population leaving the majority (59.6%) purchasing one or two items which has also previously been shown to be or include the purchase of transport or accommodation.

While the internet has undoubtedly transformed the information environment and created a variety of sources which influence tourists in their decision making process, much of the research conducted demonstrates that tourists still engage with a wide variety of sources both online and offline

throughout the duration of the decision making process in order to reduce risk. The extent to which they engage with mixed source information search depends largely on their internal motives for information search which in turn will depend on the decision makers' perceptions of the usefulness of the various sources.

2.3.6 The Perceived Utility of Information Sources

A perspective on the subject which allows for a holistic approach to be taken in research is to look at information sources in terms of how useful destination decision makers consider them to be, or their 'perceived utility'. The notion of utility is prominent in literature on tourist information sources, however, the perceived utility of information sources as a construct it is in its infancy due to lack of empirical research. Bauer *et al* (2005) discuss the perceived utility of mobile marketing; however, they do not propose a definition of perceived utility nor reference literature upon which their interpretation is based. Molina and Esteban (2006) similarly discuss the term 'utility' in their research on the usefulness of tourist brochures as information sources, but advance no definition and do not explicitly describe what is meant by 'utility'. Lam and McKercher (2013) also conducted research on the utility of tourist information sources, and while there was still no definition of information source utility put forward, they did at least identify two of its key components: currency, or how up to date the information is, and the accessibility of the information. While their findings (which are focused on the utility of the information provided by National Tourist Organisations to hospitality providers) do not directly address the questions within this research, by identifying two constituents of information utility at least advances of the understanding of what is meant by perceived utility of information and is therefore of value to this research. Nusair *et al* (2013) finally advanced a definition of perceived utility in connection with tourist information and although their research focused on travellers' commitment to online social networks rather than the actual usefulness of information sources, their definition is worth considering. According to Nusair *et al* (2013), perceived utility (of online social networks) is defined as 'the prospective adaptors' subjective probability that applying the new technology from foreign sources will be beneficial to his personal wellbeing'. D'Alessio (2015) researched information utility in relation to attitude formation, but once again, no definition was advanced and there was no explicit identification of what perceived utility entails.

For the purposes of this research, the perceived utility of information sources has been defined as *the degree to which an information source is perceived by an individual to be a useful contributor to the attainment of their decision making goals*. As a construct, it is made up of four key characteristics; how up to date the information held on that source is, how accessible it is seen to be, the perceived credibility of the source and the value for money that the source is seen to provide where bookings are also possible. The research of Lam and McKercher (2013) supports the inclusion of information currency as a key contributor to the usefulness of the information provided by a source, and it also supports the inclusion of information accessibility. The inclusion of this second characteristic, the accessibility of the source, is further supported by Molina and Esteban (2006, p. 1039) who state that 'the most common criterion for one type of information source being more important than others is its accessibility to a greater percentage of consumers'. Shi (2006) and Frais et al (2008) also discuss the importance of accessibility to the usefulness of the source.

The credibility of information sources has also been widely researched and the perceptions of commercial and non-commercial sources and the degree to which they are seen to be biased has been discussed previously. Veasna *et al* (2013, p. 512) go so far as to state that information source credibility 'is a central cue in the decision making process that can affect tourists' overall attitudes and the behavioural intention towards a specific destination'. Support for the inclusion of this characteristic as one of the fundamental contributors to the perceived utility of an information source is also provided by Ayeh et al (2013, p. 8) whose research results found a 'relationship between source credibility and disposition toward information'. Jacobsen and Munar (2012) also found that amongst their research sample, very few respondents considered information sources to be of importance when the perceived credibility was low. Finally, Kim *et al* (2011) and Tan and Chen (2011) also support the importance of value for money in the choice of information sources used in the destination decision making process. The research of Kim *et al* (2011) concluded that friends and relatives were seen as particularly useful as they offered a way of achieving good value for money, and Tan and Chen (2011) identified the world wide web as an information source which is used to discover the best value deals.

These four characteristics; credibility, information currency, ease of access and value provided are the items that are most prevalent and prominent in the literature on perceived utility of tourist information sources. They are thus considered to be the items that form the construct of perceived

utility of information sources, and the following hypotheses is put forward in this research to be tested;

Hypothesis 1; the decision to use a specific information source in the destination decision making process or not is correlated to its perceived utility.

Hypothesis 2; the use of certain information sources to research destinations significantly affects the likelihood of the destination being either chosen or rejected.

2.3.7 Cultural Influences on Information Search Motives

One of the most significant influences on information search that has been the focus of much research is culture, which in itself has been the subject of hundreds of definitions (Erez and Earley, 1993, cited in Money and Crotts, 2003). Kluckhohn's (1954, p. 86) often cited description of culture is 'patterned ways of thinking, feeling and reacting, acquired and transmitted; the essential core of culture consist of traditional (i.e. historically derived and selected) ideas and especially their attached values'. Many authors (for example, Turner *et al*, 2001; Decrop and Snelders, 2004 and Sirakaya and Woodside, 2005) agree that culture 'shapes' consumer decision making, whereas other go so far as stating that culture is of paramount importance when it comes to understanding consumer decision making. Culture and its effect on consumer behaviour cannot be exhaustively discussed within this research, but neither can it be ignored. Initially, a discussion on the terminology and development of the research agenda will be beneficial to the understanding of the effect of culture on consumer decision making.

In relation to the commercial world, the significance of culture is its influence on both sides of the marketing marriage; communication (in the forms and content that is acceptable) and consumer behaviour (which relates the nature and degree of search behaviour) (Engel, Blackwell and Miniard, 1985). The results of research pertaining to culture are commonly summarised based on a group's nationality rather than any nomenclatorial system of identifying cultures, and while this is generally accepted as a division of peoples, it is useful to briefly discuss the terminology and the implications as 'culture and country are not synonyms, so cultural factors are only loosely related to the nation state' (Farley and Lehmann, 1994, p. 113). Differences in behaviour between people of different

nationalities are often brought about by institutional factors such as the restrictions (or their absence) on the flow of products or information through distribution systems. Farley and Lehmann (1994, p. 113) call these 'differences in the small' and they represent external influences or even edicts, the removal of which may allow consumers to behave more naturally based on their own ideas and values which may be rooted in culture, rather than in ways which are prescribed by others. 'Differences in the large' (Farley and Lehmann 1994, p. 113) represent behavioural patterns brought about by cultural differences which, significantly, can cross borders and may be based on ethnicity, religion or life experiences rather than nationality. These are internally motivated behavioural patterns. The relevance of this distinction should not be lost on marketers wishing to create marketing strategies for international segments. While it must be acknowledged that cultures can cross international borders, many researchers use national boundaries to segment peoples and describe their culture as they consider that 'delimiting a cultural group is often impossible' (Clark, 1990, p. 69).

Whilst Clark (1990, p. 66) admits that generalisations about nations 'would be clouded by variations within the groups' he goes on to adopt the term 'National Characteristics' in his paper on marketing and international consumer behaviour due to the notion that national character is not only researched through a culture centred approach, but a personality centred approach. During the 1960's research on the behaviour of large social units was moving away from the culture centred approach towards the personality centred approach (Clark, 1990) which aimed to identify the 'modal personality' of each group by observing, enumerating, tabulating and aggregating the traits of peoples. However, the culture and personality centred approaches coalesced somewhat when it came to 'dimensionalising' the major influences on behaviour. To illustrate the point, two of the major contributions to the personality approach and the cultural approach were made by Inkeles and Levinson (1969) and Hofstede (1980) respectively. Inkeles and Levinson (1969) concluded that the significant dimensions of personality were (1) relation to authority, (2) conceptions of self and (3) primary dilemmas or conflicts and how they are addressed. Hofstede (1980) concluded that the significant dimensions of culture are;

1. Individualism; the extent to which societies encourage and reward individual behaviour over group or collective behaviour.
2. Power distance; the level of tolerance that a society has for differences in class, wealth and influence amongst its members.

3. Uncertainty avoidance; describes the extent to which the members of a society accept or attempt to avoid uncertainty and ambiguity.
4. Masculinity; where cultures are inclined to competitiveness, assertiveness, materialism, ambition and power. Feminine cultures place a higher value on quality of life and relationships.

Hofstede himself noted the 'amazing similarities' (Cited in Clark, 1990 p. 70) between the two conclusions on the significant influences on behaviour within large social units and the distinction between the two approaches dissolved.

Hofstede's Cultural Dimensions creates an empirically based generalisation of how certain the cultures within certain nations can be described. Although the ascribed dimensional scores of each country included may be used to explain or even predict the behaviour of those cultures relative to another culture, Hofstede himself stresses that the model is not intended to describe a culture and even less to describe the behaviour of an individual within a given culture. One may identify that the Japanese culture is more risk averse than the British, and therefore predict a stronger inclination for Japanese consumers to purchase life insurance than British consumers, but the model cannot be used to identify the number of premiums sold in Japan. Hofstede's Cultural Dimensions Index has widely adopted in cross cultural consumer research and various dimensions have been integrated into tourism research, for example; Money and Crotts (2003), 'The effect of Uncertainty Avoidance on Information Search'; Chen and Gursoy (2000), 'Cross Cultural Comparisons of Information Sources Used' and Lee *et al*, (2007) 'Cross National Studies of Tourists' Search for Different Types of Information'.

2.3.7 Modern Thoughts on Culture

There have been questions raised over the validity of research based on Hofstede's (1980) Cultural Dimension Index in the modern marketing environment due to the understanding that cultures change their characteristics over time. As stated by Beugelsdijk *et al* (2013, p. 2), 'Concerns about temporal stability apply particularly to Hofstede's culture framework, both because of its widespread use and because Hofstede's culture dimensions are based on survey data collected more than 40 years ago'. Baskerville, in her 2003 paper entitled 'Hofstede Never Studied Culture', stated

that ‘cultural diffusion and the dynamism of national and ethnic shifts may be problematic where reification and indexation of cultures is concerned’ (2003, p. 1). The dramatic political changes in Europe, for example have resulted in, for one thing, the free movement of the labour force, allowing populations to migrate from country to country with significantly less restrictions. The impact on countries’ ‘cultural dimensions’ is not clear. In a similar way, the rapid urbanisation of countries such as Malaysia (which in 2009 had reached 71%[8]) results in higher levels of disposable income, greater demand for consumer goods and an evolution of culture towards capitalism. An understanding of how cultures change and the impact on the validity of research is required.

Two major opposing arguments have been put forward regarding the evolution of cultures; the *convergence* theory and the *divergence* theory. The convergent theory assumes that as international communications improve, tastes, values and opinions become (more) shared therefore resulting in greater similarities between consumer behaviours in different countries. Examples of this may be the ever growing demand in ‘Western’ countries for Asian consumer electronics. The internet is said to have played a significant role in the convergence of cultures according to the theory. In contrast, the divergence theory propounds that cultures are becoming more distinct over time. Reisinger and Crotts (2009) use the large differences in value systems and consumer behaviour between countries in the European Union to support their claim that ‘there is no evidence of consumer converging value systems’ (Reisinger and Crotts, 2009, p. 154). Other authors (Usunier and Lee, 2005) argue that convergence and divergence can actually occur simultaneously and that consumption patterns become more homogenous on the international level, but cultural uniqueness is preserved or even enhanced on the regional or local level. The tourism industry may go some way to providing an explanation of this as cultural differences are often emphasised as they ‘are what attract tourists to a particular destination’ (Reisinger and Crotts, 2009, p. 154).

Other theories on how cultures evolve include the ‘*crossvergence’* theory (Ralston *et al*, 1993) which makes the assumption that cultural values (and the resulting behavioural patterns) do change due to the interaction of peoples. Tourists travelling to international destinations may, for example, adapt their normal behaviour to some extend by adopting that of the host country. International cuisine is an ancient demonstration of this process. Given that cultures are evolving (one theory on the state of culture that is not evident is that it is static), and that many cross cultural studies are based on the

[8] UNICEF

Cultural Dimensions Index, the question of validity of such research should be addressed. Firstly, it must be said that the Index has been updated twice since its original calibration in 1980; once in 1994 and again in 2008, therefore research using the Index can and should use the most up to date calibration.

Reisinger and Crotts (2009) conducted research on the 'issues of divergence and convergence' in relation to research that uses the Cultural Dimensions model to discuss consumer behaviour in tourism. The research methodology included reapplying the data collection instruments used by Hofstede to create the 2001 calibration to eight participating nationalities (four Western, four Asian) in order to compare the results with those found by Hofstede in his updated index of 2001. The results 'revealed strikingly similar mean values' (Reisinger and Crotts, 2009, p. 156), thus supporting the assumption that cultural changes occur slowly and that research based on the Cultural Dimensions Index is valid if based on the most recent calibrations.

2.3.8 Cultural Dimensions Index and Information Sources

In relation to consumer behaviour, most research tends to focus on the Uncertainty Avoidance, Power Distance or Individualism index or all three. For example, Dawar et al (1996) conducted research into how these three cultural dimensions affect the information search behaviour of decision makers. In a culture with a high Power Distance score, there exists (a tolerance to) power inequality between members of society. Those with more power and influence are perceived to have gained it through 'force, manipulation and inheritance' (Dawar et al, 1996, p. 501). In relation to the influence of information sources, the results showed that the lower the Power Distance, the greater the proportion of people who use non-personal sources (i.e. sources where a trust relationship has not been established in advance). The reason given for this result is that cultures where high levels of Power Distance exist demonstrate 'a general distrust of others, since power is generally seen to rest with individuals, but to be coercive rather than legitimate in nature' (Hofstede, 1980, p. 229).

The Uncertainty Avoidance Index (UAI) score exhibited by a culture also affects the preference to information sources as a high Uncertainty Avoidance tendency drives decision makers to search from sources where a trust relationship has already been established. The truth and reliability of

information is of utmost importance to decision makers in cultures scoring high on Uncertainty Avoidance. Tourists in such cultures may rely more on an airlines safety record and punctuality score rather than customer feedback and testimonials. However, the opinion of friends and family that are deemed reliable are said to be the most trusted sources due to the established trust relationship. The results of Dawar et al's (1996) research on purchase decision involvement and UAI showed that 'the greater the uncertainty avoidance... exhibited by a country, the smaller the proportion of consumers who search for product information from non-personal sources' (Dawar et al, 1996, p. 507). These findings are summarised in Table 2. The conclusion is that personal sources such as friends and family bear more credibility than non-personal sources such as Destination Management Organisations or consumer magazines. This agrees with Fodness and Murray's (1997) assumptions (see section 6.2) regarding the levels of trust ascribed to non-personal sources.

Table 2; Culture and Information Source Matrix

	Information Source	
Cultural Dimension	**High**	**Low**
Power Distance	Personal Sources, Non Commercial	Non-personal
Uncertainty Avoidance	Personal Sources, Non Commercial	Non-personal

Source: Summarised from the findings of Dawar *et al* (1996)

Where countries demonstrate high levels of individualism, they are understood to encourage behaviour which results in individual achievement as oppose to group or collective achievements. Individual opinions are accepted, as is the right to a private life. Triandiset al (1988) identified that individualist cultures typically form a larger number of relationships than collectivist cultures, but the relationship may be abandoned if it no longer benefits the individual. In their (1996) research, Dawar et al made the assumption that the Individualism characteristic would have an impact on the *extent* of information search. They state that information search is behaviour which 'is reflective of individual initiative on the part of the concerned consumer' (Dawar, Parker and Price, 1996, p. 503). Their results did not support this assumption and they concluded that Individualism does not influence the extent of information search conducted by consumers. Further research into the effect of the Individualism characteristic tends to be complicated by the fact that tourism is by nature an outlet for personal tastes and behaviour rather than a contributor to societal needs and therefore represents individually orientated behaviour. However, the act of information searching itself, rather than the overall tourism experience can be researched with regards to the Individualism cultural

dimension. Chen (2000) interpreted the Individualism dimension in terms of a consumers' inclination to seek the opinions of others during the decision making process. Consumers from countries with a high Individualism score would be expected to search through generic non-personal sources such as guide books or mass media outlets whereas consumers from countries with a low Individualism score (which represents a collectivist culture) would be expected to ask friends and relatives or employ travel agents.

Chen (2000) conducted research on business and leisure travellers from Japan[9], South Korea[10] and Australia[11] in order to examine the relationship between the information sources and Individualism cultural dimension. The results demonstrated that business travellers from all three nationalities had distinct source preferences[12] regarding information sources; the Japanese and South Korean business tourists were more inclined to adopt a collectivist approach to information search by employing the corporate travel office while business tourists from Australia adopted a mixed approach to information search (such as using the internet as well as friends and relatives). This supports the expected behaviour of members of the relative cultures. For leisure tourists however, the respondents from all three countries demonstrated a mixed strategy where personal and non-personal sources were used. For example, Australian tourists gathered information from travel agents (personal) and TV (non-personal) and South Korean tourists were found to use newspapers (non-personal) and friends and relatives (personal).

As Hofstede's work on cultural dimensions has become pervasive in social science literature (Litvin et al, 2004), many authors have attempted to apply its implications to consumer decision making in the tourism industry with mixed results. For example, Dawar et al (1996) and Chens' (2000) results demonstrated that the individualistic dimension was not an accurate predictor of consumer behaviour. In addition, the use of Hofstede's Cultural Dimension Index as a predictor of the behaviour of individuals within a culture may also be misleading as it was never intended for this use (Hofstede, 1999). As stated by Reisinger and Crotts (2010, p. 156) 'a nations positioning along each

[9] Individualism score 46
[10] Individualism score 18
[11] Individualism score 90
[12] Japanese preferred travel guides and the corporate travel department, South Koreans preferred travel agencies and newspapers and magazines and Australians preferred national tourism offices, personal computers (internet), airlines and friends and relatives

of Hofstede's dimensions will not perfectly predict how a citizen in that country will behave or what he or she will buy… Nevertheless, cultural differences still produce significant measureable effects'.

Unlike the Individualism dimension, a correlation has been proven to exist between the Uncertainty Avoidance index and the Power Distance Index of a country and its choice of information source along the personal and commercial axis (Money and Crotts, 2003). This is of use to marketers as it improves the understanding of how best to communicate with the customers within a targeted culture.

Although much research has already been conducted on the impact of culture on the tourists' decision making process, according to Correia et al (2010) this area of research still requires more attention. Empirical evidence (See Litvin et al, 2004) suggests that cultural differences are significant enough that marketing may be more effective if it is adapted to specific cultures taking into account their 'risk aversion tendencies'. Correia et al (2010) argue that Power Distance is the most important cultural trait.

2.3.9 The Effect of Age, Gender, Education and Income Demographics on Information Source Choice

Much research has also been conducted on the influence of other demographics variables such as age, gender, levels of education and income on the use of information sources (e.g. Luo *et al*, 2004; Kim *et al*, 2007; Ip *et al*, 2012 and Moisescu, 2013); the results of which are not always consistent. For example, Lou *et al*'s (2004) research on the use of the internet compared to other sources of information found no differences in information source use patterns between people of different ages. This result is supported by that of Moisescu (2013) in the main, however, Moisescu (2013) did identify significant differences in the use of one particular information source between age groups; travel agents. According to his results, the use of travel agents in the information search stage of destination decision making is correlated with age, i.e. as age increases, so does the use of travel agents (Moisescu, 2013). Ip *et al* (2012) research on the use of travel websites for planning and sharing travel experiences found that the most common users of travel websites tended to be from

the younger age demographics. Their research did not extend to exploring the different types of travel related web sites that were used but treated the internet as one single information source.

Mirroring the results for the age demographic, Luo *et al* (2004) also identified no relationship between levels of education and the use of the internet or other tourist information sources, whilst Moisescu (2013) did. Once again Moisescu (2013) identified a correlation between levels of education and the use of travel agents in the information search stage; the higher the level of education, the higher the usage of travel agents in the decision making process. Jacobsen and Munar's (2012) research found specific relationships between level of education and the use of social media, tour operator/travel agents' web sites as well as direct communication with airlines; their research found that as the level of education increases, the use of these sources decreased.

Findings on the effect level of (household) income on tourist information source preferences have again been mixed, partly due to the varied focus of the nature of research on the subject. For example, Luo *et al* (2004) who conducted a general investigation into information search behaviour and tourist characteristics found that income was significantly related to the use of information sources; respondents on lower levels of income were more likely to use traditional information sources, i.e. travel agents and friends and relatives rather than the internet. Respondents on higher levels of income were more likely to use travel agents, direct communication and the local tourist board for information, but their source usage was more distributed than that of the lower income group. Their middle income group demonstrated the most evenly distributed information source use pattern of all, with no clear preference. It is worth noting that Luo *et al*'s (2004) research was conducted while Web 2.0 was in its relative infancy, which explains the apparent low usage of the internet as an information source. It is, however, a useful benchmark which identifies patterns of information source usage amongst levels of income and is therefore still relevant. Moisescu (2013) found a significant relationship between level of income and the use of personal information sources; respondents on higher levels of income were significantly less inclined towards using personal sources than respondents on lower levels of income. This pattern was repeated with e-word of mouth communication as Moisescu (2013) found a negative correlation between the use of this information source and level of income. In their research in 2012, Ip *et al* found that a significant relationship existed between the use of travel web sites and income; they state that as income increased, respondents were more likely to include travel web sites in their travel planning process.

Kim *et al* (2007) researched the differences in the use of online travel information between the genders and found significant differences. First of all, they found that females spend more time online and also that they have a more positive general attitude to both online and offline information sources than males. Kim *et al* (2007) also found that females prefer official destination web sites provided by the local tourist board than males and that they also attach higher ratings to the value of printed media. Kim *et al* (2007)'s results showed little or no differences between genders and preferences for TV, newspapers or travel agents as tourist information sources. This is in contrast to Ip *et al* (2012) who found no significant differences in the use of travel websites in the travel planning process. Moisescu's (2013) research identified a number of significant differences between the genders and the perceived level of bias, or credibility of information sources. Travel agents and personal sources such as friends and relatives were seen to be more credible sources of travel information by females, whilst males perceived direct communication, in particular with accommodation providers, to be more credible than females. Given the findings from previous research, the following hypothesis will be tested within this project:

Hypothesis 3; demographic differences affect the role of information sources in the destination decision making process.

2.3.11 Summary

The range of information sources on tourist destinations available to decision makers is diverse and evolving. Information sources may be classified as commercial or non-commercial, personal or non-personal and passive or active; each category being perceived differently by the decision maker. Research has shown that word of mouth communication is a resilient tourist information source, although its eminence is being challenged by information sources which are exploiting the emergence and the benefits of the World Wide Web. The proliferation of information sources on the World Wide Web has created a new information landscape, giving decision makers access to a wider range of commercial and non-commercial sources which has changed consumer behaviour. Some of the changes are manifested in the different information source preferences of different demographics; preferences which, according to research, appear to be based on the decision makers' perspectives of key characteristics of the different information sources, namely its credibility or level of bias, currency or how up to date it is, accessibility and the value it is seen to

offer. These combined characteristics may represent the overall perceived utility of the information source which itself may influence whether the source is used in the destination decision making process or not.

2.4 Operational Aspect of Information Search

As has been discussed previously, where there are more than one choice alternatives available to a consumer, and where the level of involvement and risk is elevated, an extended decision making process must ensue. This decision making process necessarily involves the collection and evaluation of information relevant to each choice alternative with the aim of reducing risk by reducing the level of uncertainty surrounding the decision. However, there are different perspectives on the extent to which the decision making process can reduce or even eliminate risk; the argument centres on the extent to which we, as human beings can accurately measure risk.

2.4.1 Measuring Objective Risk

The debate between theorists who believe that outcomes and probability can be predicted with certainty and consumer researchers who believe that it cannot may be considered to be a question of philosophy (Mitchell, 1999). One argument is that the objective probability of a certain outcome and its associated consequences exist independently of perception and measurement, and therefore risk is objective and can, theoretically, be calculated. Conchar *et al* (2004, p. 419), for example, states that 'risk can be conceptualised as an objective characteristic of a given situation'. The other argument is that the extent and level of risk is entirely dependent on the perceiver and therefore wholly subjective (Conchar *et al*, 2004). Many researchers in the field of consumer psychology who prioritise subjective (often called 'perceived') risk, concede that objective risk does exist, but it is rarely possible to measure it (Mitchell, 1999). However, whether risk can be measured and incorporated into a decision making model has been researched for decades, indicating firstly its contentious nature and secondly the importance to marketers and business managers.

Economic theorists such as von Neumann and Morgenstern (1944) discuss the 'rational consumer' who obtains complete information before making an accurate judgement which maximises the utility of a purchase decision. Von Neumann and Morgenstern (1944) conceived the Expected Utility

(EU) theory to describe choice preferences in decision making situations involving risk, which centres on mathematical calculations of the consequences of alternatives. In his paper in 1982, Shoemaker described this theory as the major paradigm in decision making since the Second World War, such is the esteem that the model has been held in. EU theory is an evolution of Expected Value (EV) theory where simple probability/reward calculations can be used to predict decisions (in theory). To provide a simple example of EV theory, consider a gambler who calculates the chance of a £1,000 pay out as 1 in 10 and the cost of the bet is £25. Under these circumstances, the bet represents good value and the theory would assume that the gambler accepts the risk in return for the potential reward. Increasing the complexity of EV theory is the notion that the gambler may be faced with more than one option to choose between. In addition to the option above there may be another bet with a reward of £2,000, a chance of success of 50 to 1 and the cost of the bet is £15. It is fairly simple to calculate that the gambler will still choose the first option, but the more options that require consideration, the more complex the decision making process and the closer we get to our limitations in processing power. Again, the tourism industry provides an excellent opportunity for research in this field due to the near limitless combination of choice alternatives available to consumers.

EU theory adds a level of sophistication to EV theory as it helps to explain why the gambler may actually select the option with the higher potential reward rather than the highest probability of reward. Firstly, it implicitly includes risk (or risk aversion) and secondly the desired outcome is expressed in terms of its subjective utility rather than numerical value, thus allowing for personal preferences. Regardless of these two concessions, according to von Neumann and Morgenstern (1944), decisions can still be calculated and predicted using formulas that include a utility function. A person will choose one option over other alternatives if the utility function of that option exceeds the utility function of the remaining options. The utility function can be described as the expected utility of the outcomes weighted based on the probability of their outcomes. This function, also called the von Neumann-Morgenstern function is a theorem based on five axioms:

1. *Independence*; where outcomes that are ranked according to preference do not change their rank regardless of the probability attached to its outcome. For example, person may prefer to spend a week skiing in resort A than resort B because it has a more beautiful surroundings and more suitable ski runs, but it may be that resort B is at higher altitude and therefore has

a better chance of having sufficient snow. Regardless of this probability, the person prefers resort A.

2. *Monotony*; where the decision maker knows the probabilities of achieving a 'desired outcome' that is associated with each alternative. The decision maker is predisposed to choosing the alternative with a higher probability of achieving that 'desired outcome' than an alternative with a lower probability. The alternatives in question have the same 'desired outcome', but there is more than one possible way of achieving that outcome. A simple example may be online versus face to face payment methods. Empirical studies (see Athiyaman, 2002 for an example) have shown that many people purchasing holidays or holiday elements deem the security risk associated with the internet too great and prefer to pay an agent or operator directly even though, in both cases, the desired outcome is the same.
3. *Completeness*; where an individual has discrete and well established preferences over alternatives and the alternatives are ranked in terms of those preferences. Preferences incorporate the desired outcomes and their probabilities.
4. *Transitivity*; where alternative 1 is preferable to alternative 2, so therefore 1 must also necessarily be preferable to alternative 3. This axiom also identifies that an individual makes selection decisions based on *completeness*.
5. *Continuity*; where if there is an alternative and probability combination that is desirable, and an alternative and probability combination that is undesirable, there must be an alternative and probability combination where the decision maker is indifferent to the alternative. Taking a skiing holiday as an illustrative example again, if good conditions can be guaranteed, the tourist may want to go skiing. If conditions are guaranteed to be poor, the tourist does not want to go skiing. Between the two extremes, there exists a scenario where the tourist is indifferent between whether to go or not.

An accurate prediction of the result of the decision making process can be made based on 'the weighted sums obtained by adding the utility values of outcomes multiplied by their respective probabilities' (Mongin, 1997). Although Expected Utility theory is most commonly applied to economics and politics, it can be used in any decision making context. Moutinho (1987, p. 29) describes the Utility of a tourist destination as the 'function of estimated utilities of the attributes that comprise it' Sheluga *et al* (1979) state that the utility of a destination can be described as:

$$U_{jk} = f(u_{1jk}' u_{2jk}'.....u_{njk})$$

where U_{jk} is the utility of product j for tourist k and U_{njk} is the utility of the ith attribute of product j for tourist k (i = 1, 2,...n). Most of the literature involving EU theory is largely formulaic in nature (see Machina, 1982; Loomes and Sugden, 1982; Kahneman and Tversky, 1979; Hey and Orme, 1994; Dubra *et al*, 2004), thereby giving credence to the argument that risk can be calculated and decisions can be based on the calculations.

2.4.2 Criticisms of EU Theory and the Concept of Homo Economicus

The source of von Neumann and Morgenstern's theory, The Theory of Games and Economic Behaviour (1944) has been the subject to a vast amount of research since it was put forward, (Google Scholar identifies over 25,000[13] citations of this work), and inevitably has received criticism as well as support. Just ten years after its conception, Edwards (1954, p. 474) claimed that EU theory, just like expected value theory 'does not fit the facts' and in 1982 Machina (p. 278) stated that EU theory presents an excellent normative model, but 'its descriptive validity is not quite as favourable'. Halpern and Stern (see Jones 1999, p. 305) agree that 'EU theory is no longer seriously entertained as an accurate descriptive theory'. Fundamental elements such as the axioms themselves have also faced criticism. Loomes and Sugden (1982, p. 805) state that 'it is well known that many people behave in ways that systematically violate these axioms'. One example of this behaviour was identified by Kahneman and Tversky (1979, p. 266) who found that people underweight outcomes that are merely probable in comparison with outcomes that are obtained with certainty. Their interpretation of the Independence axiom (which they call the substitution axiom) is that 'if *B* is preferred to *A*, then any (probability) mixture (*B,p*) must be preferable to (*A,p*)'. One experiment they conducted surrounded two alternative holidays, a three week tour of England, France and Italy and a one week tour of England. The longer tour was more appealing, but when a 50% probability of winning this tour was attached and the one week tour was given a 100% probability, 78% of respondents switched their preference to the tour that had certainty. According to Kahneman and Tversky (1979), this contravenes the independence axiom which states that preferences remain the same regardless of the probabilities attached to them. This interpretation and criticism of the axiom appears to be flawed however as this trial apparently represents

[13] (03/2016)

consumers' preferred *choice*, not preferred *outcome*. Authors have also conducted research into the Expected Utility theory which omits axioms that they consider to be false, (see Machina (1982) 'Expected Utility Analysis without the Independence Axiom', and Dubra *et al* (2004) 'Expected Utility Theory without the Completeness Axiom').

Although Expected Utility theory still underpins many research projects in the field of decision making, the belief that risk can be objectively assessed, and decisions made based on this rationality, is losing support. According to Jones (1999, p. 297);

> *'There is no longer any doubt about the weight of scientific evidence; the expected utility model of economic and political decision making is not sustainable empirically. From the laboratory comes failure after failure of rational expected utility to account for human behaviour. From systematic observation in organisational settings, scant evidence of behaviour based on the expected utility model emerges'.*

Jones (1999) writes in support of a more sympathetic theory of human decision making propounded by Simon (1957), the theory of 'Bounded Rationality'. Simon deviates from the standard normative econometric model of EU theory by identifying that decisions are not always made rationally because decision makers may lack or choose to invest the required amount of time or cognitive processing power to achieve a perfect understanding of all of the variables and probabilities relating to alternatives. Chen (2000) summarises that most human beings actually do not consistently follow the rules of rationality when it comes to making decisions in the context of uncertainty and that the calculation of probabilities is often inaccurate due to cognitive limitations. Hogarth (1987) provided an extensive criticism of EU theory's assumption of human rationality which is based on the limitations of human information processing abilities. The criticisms were that:

1) Perception of information is not comprehensive but selective;

2) People cannot simultaneously integrate a great deal of information;

3) Information processing is necessarily dependent upon the use of operations that simplify judgmental tasks and reduce mental efforts;

Conlisk (1996) argues that the idea that decision makers will devote valuable resources to gain perfect knowledge goes against the fundamental tenet of economics; that of scarcity. 'Human cognition, as a scarce resource, should be treated as such' (Conlisk 1996, p. 686). Whether a consumers' knowledge of the variables of each alternative is curtailed by internal (e.g. cognitive processing power) or external (e.g. time or information available) limitations, decisions are normally made in situations of imperfect rationality (Simon (1954) emphasises that this does not necessarily mean irrationally, but somewhere between the two extremes). The varying ambiguity regarding the choice alternatives has been defined as knowledge uncertainty (Mitchell, 1998). Taking a tourism product such as a simple package holiday as an example, the vast amount of data that would be needed to objectively maximise the utility of the choice between each alternative would be impossible for a human being to assimilate. As stated by Sirakaya and Woodside (2005, p. 816), 'a majority of tourism decisions may be ill-defined choice situations where outcomes have unknown probabilities because of the intangible and experiential nature of tourism'. The sheer number of variables such as location, duration, accommodation, transportation, timing, and tour operators make precise assessment of the risk of each potential decision 'beyond the vacation planners information processing capability' (Pan and Fessenmaier 2006, p. 821). In lieu of perfectly defined choices or perfect knowledge, decisions must then be made based on 'decision rules' or heuristics.

2.4.3. Heuristics and the Impact of Human Limitations on Decision Making

According to Jones (1999, p. 305), 'defenders of [utility] theory have retreated in the face of the onslaught of empirical findings' and 'the study of how people actually behave in choice situations is known as behavioural decision theory'. Behavioural decision theorists work under the notion that 'consumers have limited capacities to process information' (Bettman *et al* 1991, p. 50) and therefore decisions are not based on comprehensive rationality, but 'bounded rationality'. Jones (1999) provides an overview of the concept of 'bounded rationality' which was introduced by Simon (1947) and explains that there are two classes of human cognitive limitations to rationality, namely substantive and procedural. Substantive limitations refer to the 'tendency of humans to over-cooperate' (Jones 1999, p. 298) and procedural limitations are further divided into two types;

emotional and attentive. Emotion may override logic in many decision making situations (the hedonic-experiential activities identified previously can be used as examples, as can the decision to smoke) thereby creating situations where 'bounded rationality shows through' (Jones 1999, p. 298). Attentive limitations relate more to the limitations of human intelligence and memory to assimilate information and has been the focus of much research as the communication of information is the cornerstone of marketing (whether gaining knowledge of consumers' tastes and patterns of demand or imparting knowledge relating to the attributes of a company's product or service.)

Consumer decisions can either be stimulus based, memory based or mixed (Lynch and Srull, 1982). Stimulus based decisions are those based on wholly external information sources where the significant values relating to each alternatives' attributes can be summarised, displayed and assimilated in a simple manner. A single tourism product such as a flight to a destination may be entirely stimulus based as the significant information can easily be compared if presented in the correct way. Memory based decisions are those based on exclusively internal sources of information and, as such, are more commonly related to purchases where the type or level of risk is negligible or low (possibly due to a high level of previous experience with the product). Bettman *et al* (1991) state that mixed decisions are the most prevalent type of decision and that they combine external information sources with memory to produce purchase decisions. The tourism industry gives rise to a host of situations requiring the application of mixed decision method as most people will have some prior knowledge of potential holiday destinations regardless, at the initial stages, of their suitability, yet they are unlikely to have a full picture of the variables involved in the decision. Human memory is the initial limitation to rationality.

Human memory is either long term or short term (Chun *et al*, 2011). In the context of mixed decisions, the internally stored information is retrieved from long term memory and external information is absorbed into short term, or working memory. Bettman *et al* (1991, p. 55) state that 'long term memory's capacity is generally thought to be infinite' but also that it takes time to transfer information from working memory to long term memory (they cite the figure of seven seconds) which results in humans relying on working memory for many complex decision making situations where there are a lot of unknown variables. Working memory is needed to process the information that has been gleaned from the external environment, however, unlike long term memory, working memory has a limited capacity. Early studies (Such as Miller, 1956) put the limit on

working memory's capacity to seven items of information plus or minus two. Simon (1974) claimed that the figure is closer to four or five items. Simple memory span tasks have been used to measure working memory by asking subjects to recall a sequence of items in their correct order.

In the context of consumer decision making, information regarding the attributes of the choice alternatives is often displayed sequentially, for example, adverts and the information presented within them are often observed one after the other giving credibility to the sequence based studies of human memory. The alternative to sequential information presentation is simultaneous information presentation which is where consumers can access all of the relevant information at the same time, such as in comparison tables for flights or computer specifications. Relatively simple, individual products or services can easily be compared in this way and decisions can be made based on the comparisons as working memory can be refreshed quickly and easily through the use of the comparison tables. However, the internet has contributed to the current situation where organisations can convey large amounts of rich information simultaneously at very low cost (Chen *et al*, 2009), resulting in the potential for information to exceed cognitive capacity. Studies by Jacoby *et al* (1974), Lurie (2004) and Lee and Lee (2004) have attempted to find a universal threshold of information capacity. Henry (1980) observed that information capacity and overload thresholds vary from person to person, however, one constant is that in situations where the volume of information exceeds a humans' cognitive capacity to assimilate the information (in either working or long term memory), 'attention' is required (Chun *et al*, 2011).

2.4.3.1 The Role of Heuristics in Decision Making

'At any given moment, the environment presents far more information than can be effectively processed' (Chun, *et al* 2011, p. 75) and in addition to this, internal information provides further competition for attention. Given the constraints on human cognitive capacity as outlined above, methods are required to deal with the volume of information accessible to decision makers. 'Heuristics are procedures for systematically simplifying the search through the available information about a problem', Bettman *et al* (1991, p. 55) and have as their major goals firstly to make a good decision and secondly to conserve cognitive effort (Bettman, 1993). Erasmus *et al* (2001) claim that consumers make a personal decision regarding the balance of the accuracy/cognitive effort trade off, or that they apply a heuristic strategy that is appropriate to themselves as individuals and to the

context of the decision. The significant difference between heuristic strategies and Expected Utility theories is that 'heuristic examination [of choice alternatives] is limited, not exhaustive' (Brandstätter *et al* 2006, p. 412), i.e. that the search for information (on alternative outcomes and probabilities) is ended by the decision maker before they achieve perfect knowledge. Heuristics therefore have 'stopping rules' which refer to the point at which people stop searching as an alternative has met or exceeded aspiration levels and any information not processed by this point is unnecessary. Shah and Oppenheimer (2008) identified five specific methods in which decisions can be simplified through heuristics; a) by examining fewer alternatives, b) by employing less information, c) by examining fewer cues, d) by reducing the level of effort in retrieving the cues and e) by simplifying the weighting of the attributes of the alternatives.

2.4.3.2 Types of Heuristic

There are a number of heuristic strategies that have been identified by authors over the decades. Chun *et al* (2011) discuss what may be considered the first heuristic strategy; one that occurs at a subconscious level and is rarely recognised as a heuristic strategy in the literature; that of attention. According to Paschler *et al* (2001) cited in Chun, Golomb and Turk-Browne 2011, p. 75), 'attentional mechanisms evolved out of necessity to efficiently focus limited processing capacity on the most important information relevant to ongoing goals and behaviours'. Desimone and Duncan (1995) claim that the goal of attention is to select between competing stimuli and effectively ignoring irrelevant information that may also be present[14]. The next logical question appears then to be; how does the consumer decide which information is relevant and which is irrelevant? The answer to the question can be found by identifying the consumers' priorities, thus we come to a second heuristic, the Priority Heuristic. Brandstätter *et al*'s 2006 paper can be used to provide an overview of the Priority Heuristic. They cite Arnould and Nicole, 1996 and Sunstein, 2003 who support the view that, on a macro perspective of priorities, 'outcomes matter more than probabilities' (Brandstätter *et al* 2006, p. 412). Somewhat conversely, according to Edwards (1954), people tend to be risk averse in situations of potential gain, or to use the words of Mitchell (1999, p. 163), 'consumers are more often motivated to avoid mistakes than to maximise utility in purchasing'. Brandstätter *et al* (2006) interpret this more from the perspective that consumers or decision makers are generally more inclined towards choosing the alternative with a lower probability of minimum gain rather than the

[14] Once selection has been made, 'modulation' takes place. 'Modulation refers to what happens to the selected item' (Chun *et al*, 2011), i.e. whether it is temporarily stored in working memory or transferred to long term memory.

alternative with the maximum possible gain. The results of their research supported this perspective. It also provided more evidence that Expected Utility theory does not work in practice and corresponded with Kahneman and Tversky's (1979) criticism of Expected Utility theory. In conclusion, Brandstätter *et al* (2006) postulate that information is sought based on the following priority order:

1. Minimum gain
2. Probability of minimum gain
3. Maximum gain

The Priority Heuristic's stopping rule, which even Brandstätter *et al* (2006) admit is merely 'a first, crude estimate, albeit empirically informed', is when 'the minimum gains differ by 1/10 of the maximum gains (across the two gambles); otherwise, stop search if probabilities differ by 0.1 or more' (Dreschler *et al* 2014, p. 3). This is displayed numerically in Table 3 below;

Table 3; An Example of the Stopping Rule of the Priority Heuristic

Alternatives					
A		B		C	
Max	Min	Max	Min	Max	Min
1,000	10	500	100	750	200
x = 0.1	x = 0.9	x = 0.15	x = 0.85	x = 0.25	x = 0.75

The maximum gain is 1,000 therefore 1/10 of the maximum gain is 100. The minimum gain for A is 10 and B is 100 giving a difference of 90 which is less than the $1/10^{th}$ of the aspired minimum gain, so the examination of the choice alternatives continues. The difference between the minimum gains for A (which gives us the maximum) and C is 190 which is more then $1/10^{th}$ of the maximum gain. Alternative C meets the stopping rule of the priority heuristic, therefore the decision maker ceases the examination of alternatives.

If the difference between the minimum gains was equal for each alternative, the probability (x) of the minimum gains would be used thus; probability of minimum gains for A is 0.9 and the difference for B is 0.05 and for C 0.15. In the context of identical minimum gains, alternative A has a

significantly higher probability (more than 0.1) and would be chosen. The difference in probability between A and B is only 0.05 which is considered insignificant, and in this case, the Priority Heuristic order dictates that the final component, maximum gains, is used to select the best alternative.

This description of the way in which the Priority Heuristic functions appears to be a complex and highly analytical decision making strategy and therefore contradictory to the definition of Heuristics, but it must be remembered that heuristics are decision simplifying strategies, not simple decision strategies. The Priority Heuristic is also consistent with other, apparently simpler heuristics in that relevant information is appraised only when needed, unlike with Utility models which require complete analysis of all relevant information prior to a decision being made. There is also significant value in this research which has identified the ordinal priorities of decision makers faced with a combination of highly complex *and* risky problem settings through in depth research of the decision making process. This level of depth may have been required to reveal these findings, however, it may not be a realistic representation of the thought process that a decision maker goes through consciously, but the thought process that may occur unconsciously. Evans' (2007, p. 256) review of contemporary extant literature on cognitive information processing in decision making contexts states that 'almost all authors agree on a distinction between processes that are unconscious, rapid, automatic and high capacity and those that are conscious, slow and deliberative'. These two modes of information processing have been given many names, but Evans (2007) simply calls them System 1 and System 2 respectively. The significance of these two modes of information processing is that much of the decision making required in a complex context takes place before conscious consideration is activated. Following on from 'System 1' information processing, comes the conscious application of cognitive skill which selectively 'ignores part of the information with the goal of making decisions more quickly, frugally, and/or accurately than more complex methods' (Gigerenzer and Gaissmaier 2011, p. 454). In other words, after subconscious deselection of a number of alternatives, specific heuristics can be applied to continue the decision making process.

The Priority Heuristic discussed above belongs to a specific class of heuristic; the class is called Lexicographic Heuristics. For lexicographic heuristics, a finite list of required attributes is created in ranked order (most important first, then second, third and so on); the alternatives are then ranked based on each attribute. For example, a destination decision maker may consider destination attributes in the following order; a warm climate, accessible by air transport, has at least one four

star hotel and so on. Alternative destinations are ranked firstly on whether they do have a warm climate or not, then on their accessibility by air transport, then on the availability of four star hotels etc. Lexicographic heuristics rank all products on all attributes, even if they do not meet the very first criteria (Hauser, 2014) – a procedure which appears to decrease the efficiency of the decision making process due the unnecessary analysis of undesirable alternatives. However, Hauser (2014) states that in reality, the lexicographic heuristic is applied in the same way as the Conjunctive Decision Making rule. This heuristic assesses choice alternatives based on 'must have' or 'must not have' attributes. The attributes of a destination (such as those above – warm climate, accessible by air transport, availability of 4 star hotels) are researched and if an alternative does not have a required attribute, it is discarded from further consideration. The distinction between lexicographic heuristics and conjunctive decision making is that the former ranks attributes in order of importance and rates every single attribute so as to identify the most favourable alternative. The conjunctive decision rule does not order attributes, but assesses them in the order that they appear to the decision maker. The conjunctive decision rule can also be differentiated by the fact that if an attribute of an alternative fails to meet a required standard, that alternative is eliminated from further review.

Tversky (1972) proposed another heuristic strategy that bridges the gap between lexicographic heuristics and conjunctive decision making; the elimination by aspect heuristic. This class of heuristic orders the attributes based on importance, but assigns the attributes a minimum level of acceptability. Any alternatives that fail to meet the level of acceptability are removed from the list of options. The process then moves on to the next most important attribute, eliminating alternatives that fail to meet the ascribed acceptance level and so on until only one alternative remains. Package holidays can be used as an illustrative example as consumers may first identify their budget, then the destinations' distance from home, then accommodation facilities etc. until they decide upon one package that suits them.

Elimination by aspect heuristics and conjunctive decision making are non-compensatory heuristics in that they do not allow for less important attributes to compensate for weaknesses in the more important attributes. Once a choice alternative is selected or rejected based on a particular attribute, the remaining attributes go unexamined, thus simplifying the decision making process. However, the terse evaluation of the variables involved in choice alternatives make non

compensatory heuristic strategies appropriate for only a limited number of decision making contexts. Non compensatory heuristic strategies equate to a relatively low level of purchase decision involvement as they imply that the consumer chooses not to engage in more extensive examination of all of the attributes of all of the choice alternatives. As has been previously stated, low levels of purchase decision involvement does not necessarily imply any specific level of product involvement – the consumer could place a high value on the products' impact on their ego or their goals, yet not feel the need to examine each alternative in detail. Repeat visitation to a destination and brand loyalty to a travel agent or tour operator can demonstrate low purchase decision involvement and therefore only a cursory examination of the alternatives is conducted by the decision maker. Some authors (Bettman *et al*, 1991; Peters, 2011) call brand loyalty the Habitual Heuristic as previous experience of the product and purchase context will have been satisfactory and therefore habit forming. Although every decision maker is an individual and therefore unpredictable to some extent, it may be generalised that non compensatory heuristic strategies may be applied in decision making contexts where time is limited, where the information available is either inadequate or too complex to effectively assimilate or where the risk of severely negative consequences is considered to be low. Where choice alternatives carry a higher level of risk, consumers will be more concerned with the accuracy and completeness of the information that they collect relating to choice alternatives. Compensatory heuristic strategies generally conduct more comprehensive examinations by assessing all of the attributes of the choice alternatives that the consumer considers important and may be applied to assist in the selection of the most appropriate alternative in high risk decision making contexts. However, compensatory heuristic strategies can vary in complexity and their level of comprehensiveness as will be seen in the few discussed below.

The satisficing heuristic (Gigerenzer and Gaissmaier, 2011) may be the most simple of all compensatory heuristic strategies as it merely states that alternatives are assessed sequentially in the order that they appear to the decision maker. The various attributes of an alternative are valued and if they reach a set aspiration level overall, that alternative is chosen and the other choice alternatives do not enter consideration. Although this heuristic is an excellent example of what are called 'fast and frugal' decision making strategies, (those that bring about decisions with the minimum outlay of time, energy or both), a deceptively large amount of deliberation may be required to establish the aspiration level in the first place. Although the Satisficing Heuristic is compensatory (as a strong attribute may compensate for one that is weak), the lack of comparison

between alternatives may be the consequence of low product involvement, limited time or an excessively complex range of alternatives.

Incrementalism is an extension of the satisficing principle, which proposes that consumers demonstrate inertia and only change their usual purchase choice if the new alternative is deemed as an improvement on the status quo. Furthermore, incrementalism suggests that an exhaustive collection and evaluation of information is not conducted, but a mere comparison is made between the alternative that is currently held as the most satisfactory and a newly evident alternative. Winter sports tourists, for example may be content to return to a favourite resort as the key components such as price, accommodation, transfer time and the nature of the pistes combine to create a satisfactory experience. However, they may also be attentive to new information on a previously unconsidered destination and conduct a comparison of the two. Incrementalism is decision making behaviour in which a satisfactory alternative has been identified through previous experience and thus represents a risk reduction strategy which is achievable under the most severe limitations (such as time and even a lack of motivation to conduct information search).

The contributions that Incrementalism made to the research agenda were firstly that it explicitly identified an extreme heuristic, one in which no information search or evaluation is conducted to identify a satisfactory choice alternative. Secondly, it emphasises the value of prior knowledge in a decision making context. Decrop (2006) described the concept of Incrementalism in decision making as 'successive limited comparisons' (Decrop 2006, p. 3) which build on existing knowledge. This 'branch method' (Lindblom, 1959, p. 81) of information search and decision making contrasts 'root method', as the former assumes that current knowledge and understanding of a problem setting is used as a starting point for decision making while the latter assumes that information search and evaluation is started afresh for each new decision context and covering every choice alternative. In many consumer decision making contexts, this appraisal of alternatives is ongoing, giving it an element of 'seriality' as Lindbloom (1959, p. 81) calls it. Tourists may regularly be exposed to broadcast and printed media which may create top of mind awareness or change their opinions however slightly. Word of mouth reviews from friends and family regarding their recent vacations are also a serial form of destination information which are strong influencers of opinions.

The frequency of good and bad features heuristic is a strategy that was put forward by Alba and Marmorstein in 1987 and simply suggests that a tally of good and bad points are made for each alternative 'irrespective of their meaning or importance' (Alba and Marmorstein 1987, p. 14). Although this type of heuristic 'may often lead to erroneous decisions because it ignores both attribute importance and the degree to which brands differ on particular dimensions' (Alba and Marmorstein 1987, p. 15), it may be useful in situations where the variance within attributes is negligible or where cognitive constraints impede further examination.

Sharing the superficiality trait of the Frequency Heuristic and in contrast to the stopping and decision rules of the priority heuristic, the equal weight heuristic does not assign importance to the attributes of the choice alternatives or probability of them occurring (Hauser, 2014). This heuristic assumes that the attributes are evaluated and scored for each alternative, but that the decision is based on the sum of the scores for each alternative rather than any importance ranking system.

A heuristic strategy that does consider the perceived importance of various attributes is the weighted additive rule (Platzer and Bröder, 2013). This strategy requires the consumer to assign a level of importance to all attributes, assess the value of each attribute and then combine the value and rank importance to identify the best alternative. Bettman *et al* (1991) state that people usually use simpler heuristics than the Weighted Additive Rule to make decisions.

More recently, the Recognition heuristic has been researched (Gigerenzer and Gaissmaier, 2007, and Klein, 2008) as a significant decision simplifying strategy which is applied to complex problem settings, often in situations where time is a significant constraint or where one alternative is perceived as significantly better than the alternatives. Recognition primed decision making assumes that prior knowledge relevant to a problem setting will influence the behaviour of the decision maker and allow them to simplify the decision making process. Gigerenzer and Gaissmaier (2007) discuss recognition in terms of its influence on brand selection. They describe an experiment where participants were given one well-known brand of peanut butter and two unknown brands and asked to rate the brands in terms of quality. The recognised brand was identified as being the highest quality and was preferred in a blind test by 59% of the participants. The results of this test were fairly predictable. However, when the high quality, recognised peanut butter swapped jars with one of the low quality alternatives, 73% of participants stated a preference for the low quality peanut

butter in the jar with the recognised brand. In addition to this result, when the three jars were filled with identical, low quality peanut butter, 75% of the participants preferred the peanut butter in the recognised jar. The results of this and other similar experiments clearly demonstrate the significance of brand recognition to consumer expectations and satisfaction – recognised brands are more likely to be perceived favourably and therefore selected and the eventual level of satisfaction is also influenced positively by recognition. As summarised by a quote in Kurz-Milcke and Gigerenzer (2007, p. 50) taken from an American professor of business; 'if he has heard of a brand, it is likely because its products are good'. In a more complex interpretation of the recognition primed strategy, Klein (2008) asserts that as complex problem settings arise, previous experience is used to identify a series of patterns within the problem. These patterns 'highlight the most relevant cues, provide expectancies, identify plausible goals and suggest typical reactions to those situations' (Klein 2008, p. 457). Klein asserts that this type of decision making strategy is applicable to high risk situations and those where rapid decisions are critical (the research was applied to fire ground commanders responding to emergency situations), but the overall concept may not apply to tourism decision making contexts which often take place over a significant amount of time. However, this type of decision making may influence the selection of the specific heuristics which may be applied to the decision making context.

2.4.3.3 Applying Heuristics to the Consumer Decision Making Process

Which heuristic strategy to use at any given time will depend on a variety of issues. Initially, the level of importance that the decision maker has ascribed to a particular purchase will be correlated to their involvement with the product or purchase decision. High Purchase Decision Involvement is the outcome of high levels of uncertainty about the alternatives in question as well as the perceived severity of the consequences of making a wrong choice. If some of the choice alternatives are perceived as potentially having highly negative financial, social, psychological, physical or performance outcomes, decision makers will strive to minimise the uncertainty surrounding the choice alternatives available in order to minimise the risks involved. Dowling and Staelin (1994, p. 120) 'acknowledge that the consumers' involvement influences the person's perception of risk'. Therefore, the level of perceived risk can be one factor influencing the choice of heuristic strategy. Higher levels of risk will require more extensive, comprehensive heuristic strategies such as the weighted additive model or the weighted additive rule rather than the fastest and most frugal such as the satisficing or lexicographic heuristics.

The discussion of risk in section 2.2.1 omitted one theory that can, and arguably should be associated with the evaluation of risk: regret theory. Regret theory centres on the belief that consumers want to avoid post purchase decision situations where they believe that an alternative choice would have provided more satisfying outcomes. Regret can be seen as analogous with each separate type of risk as it may be specifically attached to loss of money, physical, or psychological harm, negative impacts on the consumers' social status or a perceived level of performance that is low relative to another choice alternative. Although the theory of regret overlaps the types of risk and is used to conclude the evaluation of risk, it can also associated with the various theories on consumer decision making that apply probabilities to outcomes. Expected utility theory and the Weighted Additive Rule imply a choice based on minimising the likelihood of regret through comprehensive analysis of the attributes of all choice alternatives.

It has been noted, however, that regret can be the consequence of over searching as well as under searching (Irons and Hepburn 2007). Under searching creates the risk of the ideal choice alternative being unidentified, or passed over as in the case in heuristic strategies such as the Satisficing Principle. Over searching and the inclusion of more choice alternatives and/or attributes has been empirically found to impose additional costs, for example in time or cognitive effort required, both of which may be considered a scarce resource. This gives rise to the possibility that the marginal costs outweigh the marginal gains, and even that decisions may be avoided altogether. There exists a model of consumer decision making, the Incremental model, stating that humans' natural conservatism will restrict them from changing the status quo unless they can positively identify a better alternative to the current choice (see Lindblom, 1958). Some evidence of this has been found when it comes to over searching and the inclusion of more alternatives. Studies have shown that the inclusion of more alternatives can result in lower levels of purchasing (Iyengar and Lepper, 2000; Boatwright and Nunes, 2001; Iyengar *et al*, 2004), thus representing the risk of missed opportunities and regret.

After surmising the perceived level of risk associated with the decision, the next issue that guides the consumers' choice of heuristic strategy will be the internal or external limitations placed on the decision making context. Internal limitations have been outlined within this literature review as cognitive limitations. Many decisions are simply too complex to examine exhaustively, hence the

development of the concept of bounded rationality and the decision simplifying strategies that are heuristics. External limitations are the restrictions to the examination of choice alternatives that are imposed by environmental factors. For example, the information provided on the choice alternatives may be incomplete restricting the decision makers' ability to make attribute based or alternative based choices. After internal and external limitations, the third limitation that may be inflicted upon the decision making process is time. Time may be the simplest limitation to operationalise in decision making theory due to it being a one dimensional resource which is scarce (at least in the economic sense) to any individual. The amount of time available to a decision maker will dictate the extent of examination that each choice alternative may be subjected to. Situations where time is severely restricting the extent of examination possible may result in simple non-compensatory heuristics being adopted which focus on the priority of the decision maker. As stated by various authors (and identified previously), the consumer may consider that rather than maximising potential gains, they may want to minimise the risk of wasting money. Subsequently, the consumer then may assess two alternatives based solely on price and choose the cheapest product thereby reducing the risk of financial loss.

As has been discussed, heuristics play a significant role in the consumer decision making process, but they represent only one process that is involved. In order to understand how heuristics contribute to the destination decision making process (and also to achieve the overall aim of this research), it is important to critically analyse the research agenda on the overall tourist destination decision making process. The development of this complete picture provides the opportunity to frame individual micro processes such as information search and the application of heuristics.

2.5 Introducing Consumer Decision Making Models

Many authors (e.g. Engel, Blackwell and Miniard, 1985; Crompton, 1992; Decrop, 2010) have put forward models which illustrate the complete consumer decision making process (complete in terms of the entire process being contained within, from initiation to completion stages). These decision making process models vary widely in terms of their level of sophistication, complexity, the inclusion of relevant variables and their descriptive and predictive qualities. Rudimentary models depicting the tourist destination decision making process generally include relatively similar stages as those identified by Sirakaya and Woodside (2005):

1. Recognising the need for decision making
2. Identifying goals
3. Formulating choice sets
4. Collecting information on each choice
5. Making a choice among the alternatives
6. Purchase and or consuming products
7. Post purchase evaluation

While the models such as those above do represent the simplified steps of a decision making process they have, however, been criticised for being excessively simple and 'a poor description of what actually happens' Cohen *et al* (1972, p. 2). However, this simplistic model of destination decision making is not intended to be a conclusion to research on the subject, merely a starting point upon which to frame more incisive and intricate research. The variables relevant to the decision making process influence and transform the procedure at all stages from the initial recognition of the 'problem' to the final purchase decision and post purchase evaluation. The individuality of consumers as well as choice alternative specifics such as price and level of necessity suggest an argument that decision making can never be predicted with absolute certainty and that there will always be subjectivity about the theoretical process models put forward as a result of empirical research (Langley *et al*, 1995). This view is in contrast to Walters (1978, p. 43) statement that consumer decision making models "specify exact cause and effect that relate to consumer behaviour". A grand unified theory that can accurately predict the nature and force of each influential variable as well as the precise outcome of the decision making process seems unlikely.

Cohen *et al* (1974) put forward a model which represents the complexity of decision making and highlights some of the limitations of modelling such a complex process; the model was called the 'Garbage Can Model' and it emphasises the inescapable presence of time and its significant effect on decision making. In essence, and as stated by Decrop and Snelders (2004), the model suggests that 'almost any solution can be associated with any problem' (Decrop and Snelders, 2004, p. 1024) depending on the combination of variables *at a given moment in time*. Whereas Utility Theory models alluded to an immutable relationship between problem and solution, the drawback highlighted by Cohen *et al* (1972) was that the model was static and represented only a precise moment in time. The garbage can model proposes that solutions exist independently of problems

and that both can change at any instant, meaning that decisions are far less predictable than implied by utility theories. Cohen, March and Olsen (1988, p. 297) describe decisions as 'an outcome or interpretation of several relatively independent streams'. The 'streams' involved are the problems, solutions, participants and choice opportunities, all of which will exist simultaneously but all of which are also transient in nature. Cohen *et al* (1972, p. 2) state that choice alternatives, or the 'mix of garbage in a single can depends on the mix of cans available [contextual environment], on the labels attached to alternative cans [decision makers' perspective], on what garbage is currently being produced [available problems and solutions] and on the speed at which garbage is collected and removed [moment in time that decision making is activated]'. Although the garbage can model is not opposed to the notion that decisions are logical outcomes of a problem setting, it contributes to the belief that perfectly rational choices (where complete information is retrieved before choice) are unrealistic because of the fleeting nature of any variable.

The garbage can model highlights a reality faced in the tourism industry (among others); that problems as well as choices flow through time and while they may not necessarily meet geographically, they necessarily meet temporally in order to create solutions. For a tourist to be able to sit at home and book a holiday in another country, relevant information on a choice alternative that satisfies the tourists' requirements must be available at the information collection, evaluation and decision stages of the decision making process is conducted. The understanding and manipulation of the sources and *timing* of information distribution is vital to successful organisations in a competitive environment 'choices are made only when the shifting combinations of problems, solutions and decision makers happen to make action possible' (Cohen *et al* 1972, p. 16).

2.5.1 Contemporary Decision Making Models

The ongoing research of the consumer decision making process outlined above has created a deeper understanding of the issues involved and according to Ford *et al* (1989) two distinct types of consumer decision making models have emerged; structural and process models. Models classified as 'structural' are those which describe the relationship between stimuli and decision responses and are developed through statistical analysis. Structural models have been popular because they aim to enable predictions to be made between stimuli and response and have been successful in doing so. Process models, in contrast, attempt to divine how consumers move through the decision making

process between problem recognition and the final decision and are often researched through process tracing techniques.

Process Tracing investigates the thought processes that decision makers go through either through verbal protocol analysis (where decision makers think out loud) or through information boards (where decision makers move through written information on choice alternatives as they see fit). Given the research methods, it can be seen that Process Tracing research is conducted on extended decision making processes which implies involvement, risk and some level of task complexity – characteristics shared by leisure tourists selecting a travel destination.

Through such research techniques, several significant observations of consumer behaviour have been made which again support the belief that heuristic strategies and prior knowledge are applied to simplify and create assurances during the decision making process. It has been found that consumers' decision making behaviour is adapted based on their recognition of patterns within problem settings. Klein's (2008) Recognition-Primed Decision Model is founded on the assumption that solutions to problems are formed partly based on the recognition of similar past experiences and the outcome of the implemented decision. Successful past behaviour is repeated or adapted if it is deemed appropriate to the new context. It is similar to the concept of 'Contingent Decision Making' championed by Payne (1983), which infers that behavioural responses are dependent on the details of the problem as perceived by the decision maker.

2.5.2 Process Models

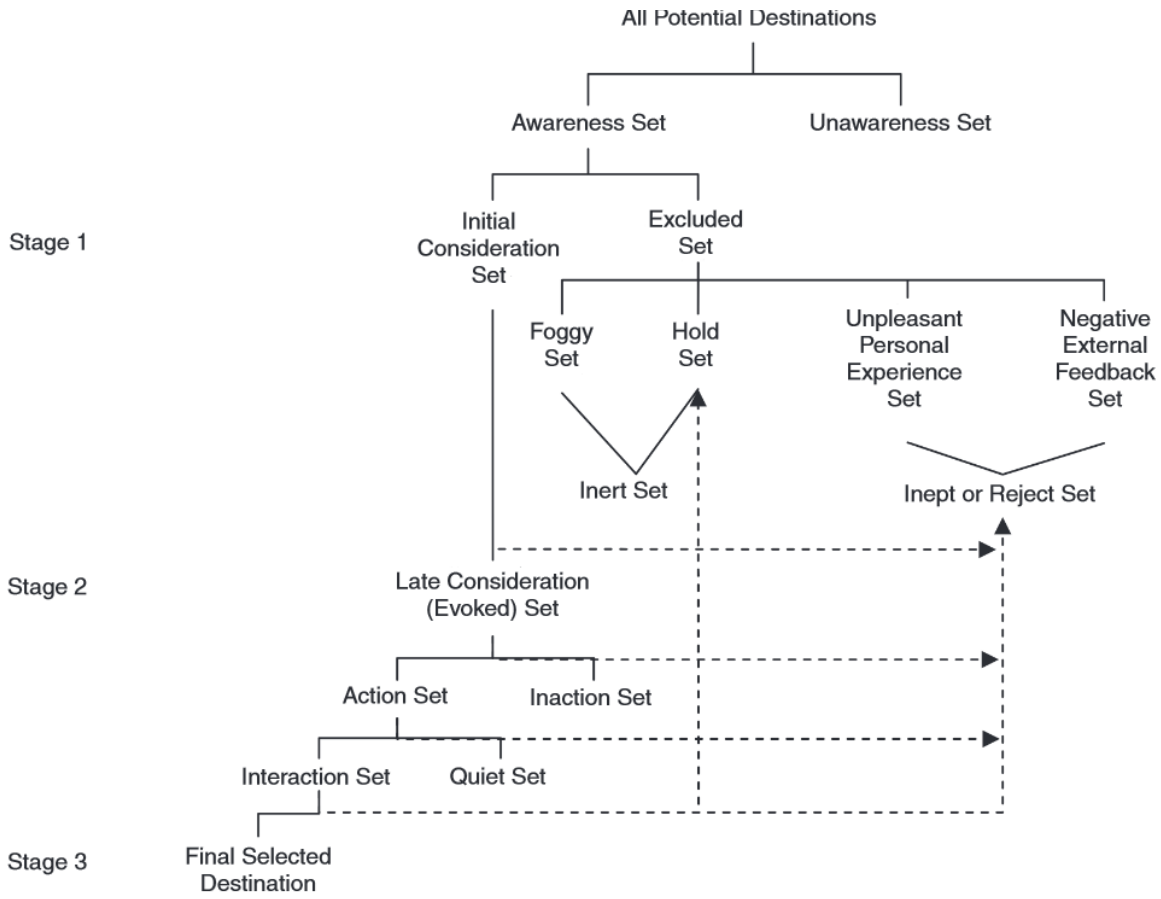
Of the contemporary models of the consumer decision making process, one type that has endured over time and has gained popularity is the Choice Set model which describes a funnelling process from many alternatives down to the final choice of one. The Choice Set theory of decision making assumes the existence of multi-attribute, complex choice alternatives from which a bounded decision maker eventually makes a reasoned selection decision which is a trade-off between utility and cost (Decrop, 2010). It is normally applied to high involvement, high risk purchases such as tourist destination choice by authors such as Crompton (1992), Crompton and Ankomah (1993), Smallman and Moore (2010) and Decrop (2010). A fundamental characteristic of the Choice Set model of consumer decision making is that options are reduced through a number of screening phases until one alternative remains and an ultimate choice is made.

Crompton (1992) identified three core stages within Choice Set models; at first there is the Awareness Set where all options are included, secondly these options are reduced through an elimination process to create a Consideration Set and then finally a single option remains as the chosen alternative. Figure 3 builds on the basic three stages and adds detail to the choice set funnelling process. The sets are described as 'exhaustive' by Crompton (1992, p. 427) in that all alternative destinations will belong to a set somewhere. The model begins one stage earlier than the three fundamental stages where all potential destinations are initially included in the choice options. They are then filtered through into an Awareness Set, discarding those that the tourist is unaware of. The Awareness Set has been credited as being a significant influence to consumer choice in many studies (Axelrod, 1968, Crompton and Ankomah, 1993) and a correlation has been found to exist between *levels* of awareness and the probability of selection. Whilst researching this phenomenon in the tourism context, Michie (1986) found the level of awareness was dependent on previous visitation and distance from the tourists' origin. By filtering out the destinations about which the tourist is unaware, a range of alternatives remain for them to begin to make decisions about. Many alternatives will be excluded from further consideration, because, according to Crompton (1992), they are either Inert or Inept. Alternatives which are considered Inert include those where the tourist does not know enough about to encourage further consideration (Foggy Set), or those which they may know about and indeed may be positively disposed to, but these alternatives are not satisfactory solutions for the current requirements (Hold Set). Other alternatives in Crompton's Choice Set model may be excluded because they are seen as Inept; the decision maker perceives these alternatives negatively either as a result of personal experience or external negative feedback. The remaining alternatives will form the Consideration Set.

The Consideration Set is further divided into an Initial Consideration Set (ICS) and Late Consideration Set (LCS). The purpose of this is to continue the reduction to a manageable number of alternatives. The number of alternatives that form the LCS has been agreed by some authors (Woodside and Sherrell, 1977; Bronner and de Hoog, 1985) as consisting of 4 (± 2) destinations, any more than that and the decision maker may be overwhelmed by the complexity of the problem. Decrop (2010) quoted a respondent in his research as stating 'it's already complicated enough to think about three [destinations]. I don't want to think about another one' (Decrop, 2010, p. 104). Identifying the size of the ICS has been more problematic for researchers and is often expressed as a ratio of destinations in the LCS to those in the ICS. The ratio, which is higher for tourism destination decisions than

products or consumables, has been found to be anywhere from 0.43:1 (Woodside *et al*, 1977) to 0.9:1 (Um, 1987). This suggests that a high proportion of destinations considered in the ICS will be included in the LCS[15]. The existence of such a potentially large LCS and the complexity of destination attibutes implies that not all destinations will be investigated fully. Some destinations in the late consideration set may elicit active information search while others may not. This is consistent with the saticficing principle which states that information search ends when a satisfying alternative is

Figure 3; Crompton's (1992) Choice Set Model



found and also reflects the economics of search as it is assumed that a point is reached where the cost of information search outweighs the benefits.

Source: Crompton (1992)

Crompton (1992) asserts that destinations within the Action Set have a higher likelihood of being selected due to the investment of time and resources that are required for the decision maker to gather information from various sources. If these sources are 'personal' (i.e. the tourists engages with a travel agent or representative of the destination) then they fall into the Interactive Set of the

[15] Extrapolating the figures (2 to 6 destinations in the LCS and ratios for LCS to ICS of 0.43:1 and 0.9:1) gives a rough size of the ICS being between 2 destinations and 14.

choice set model. Alternatively if they are non-personal, then they can be classified as belonging to the Quiet Set. Interactive Sets are deemed more likely to be chosen due to the opportunity for the representative or agent to 'sell' the decision maker the destination. The end product of the Choice Set model is then the final choice itself.

It should be understood that during this funnelling process, alternatives placed in the Consideration Sets that are eliminated may not be eliminated permanently. Although alternatives within the Consideration Sets that go on to demonstrate dominant negative characteristics will be permanently excluded as inept, alternatives which are deemed positive may be eliminated because they are less positive than the competing alternatives. These alternatives are then moved into the Hold Set and maintain the possibility of becoming the eventual choice. The Hold Set can be seen as a function of the decision making environment that has been discussed previously – that the external environment is dynamic and changes may occur that disrupt the choice set funnelling process. Situations may arise in which the most favoured alternative is eliminated by external forces, resulting in favourable but eliminated alternatives stored in the Hold Set becoming the ultimately chosen alternative. The tourism industry is rife with examples of this from simple selling out of seats on flights to a multitude of natural or man-made crises which prevent or discourage the tourist from visiting the original destination of choice.

An example of more contemporary research on Choice Set Models is the work of Decrop (2010) who conducted a longitudinal study on choice set formation and created a model (Figure 4) which shares characteristics with Crompton's (1992) model. Both models begin with all available options and then proceed to an Awareness Set and an Unawareness Set. Following this, Decrop describes an Evoked Set which represents Compton's (1992) Consideration Set. The first difference of opinion appears when identifying alternatives that are either negatively or neutrally perceived by the decision maker. Neutrally perceived alternatives are allocated to the Surrogate Set, which is identical to Crompton's description of his Hold Set in nature and negatively perceived alternatives are allocated to the Exclusion Set. Decrop's Exclusion Set is Crompton's Inept Set as both contain alternatives that will not be considered as a result of a negative perception. Decrop appears to have no category for Crompton's Foggy Set, where tourists have limited information regarding a destination. It may be that Decrop assumes that allocation to choice sets can be made with or even because of limited information. A tourists' ignorance of a destination beyond their basic awareness of it suggests a feeling of apathy towards that destination – it is not seen positively or negatively. This would then

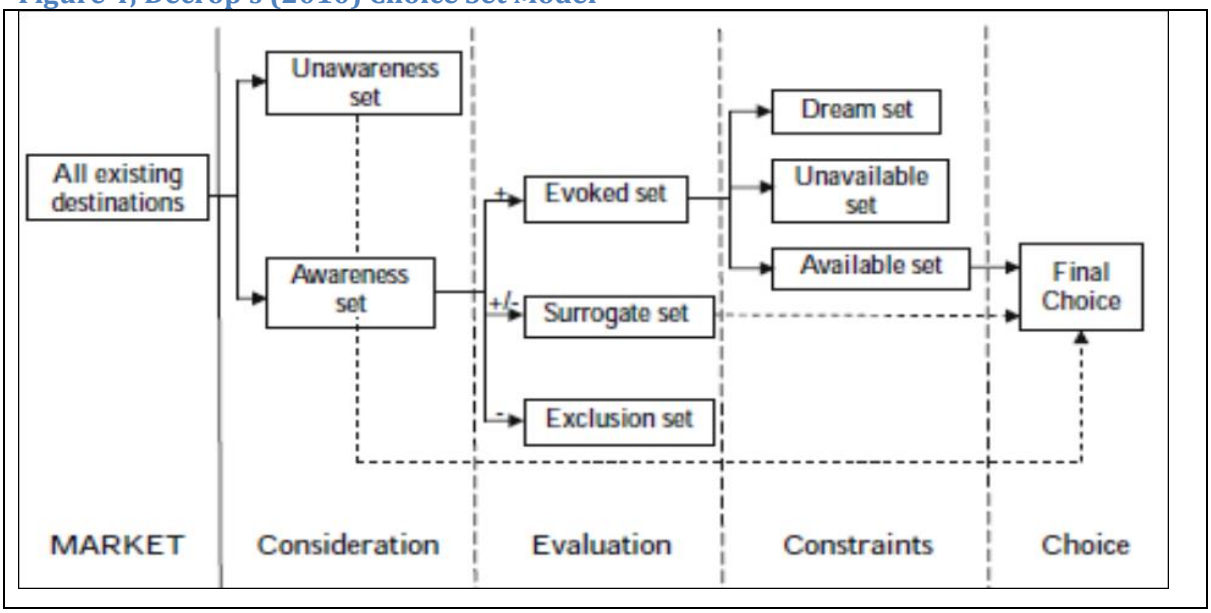
belong in Decrop's Surrogate Set. Destinations that are perceived negatively would be eliminated and therefore allocated to the Exclusion Set and finally, destination for which the decision maker has *sufficient* positive information would be included in the Evoked Set. In practice, assuming that information is available, it remains to be seen whether a destination which a tourist is aware of is eliminated due to lack of information alone. Due to the number of destinations in the Awareness Set, lack of information may still be a significant filter of alternatives.

Following the formation of the Evoked Set, Decrop introduces the Sets which Crompton does not explicitly acknowledge; the Dream Set, Unavailable Set and Available Set. The inclusion of these sets helps to overcome a specific problem. In the field of tourism, this initial stage of the choice set model has caused researchers problems due to the extensive list of potential destinations that a tourist is likely to be aware of, and also the almost infinite list of destinations they may not be (Crompton, 1992). Crompton applied the two stage Consideration Set to filter the alternatives whilst Woodside and Sherrell (1977, p. 15) addressed this problem by proposing an 'awareness-available' set and an 'awareness-unavailable' set and eliminated the unawareness set. The inclusion of the term 'available' was used to imply that a tourist believes that they are able to visit the destination within (roughly) the next year. Although an improvement on the basic model, this has been criticised (Crompton, 1992) by the fact that while a tourist may have the time and resources to be able to visit a destination, they may have absolutely no intention of doing so. Decrop's (2010) model includes a Dream Set, Unavailable Set and Available Set thereby applying the 'available'/'unavailable' filter after the acceptable alternatives have been placed into the Evoked Set thereby overcoming the criticisms directed at previous models.

Destinations in the Dream Set are regarded positively but are not viable alternatives as due to 'structural constraints' (Decrop, 2010) which are enduring in nature and therefore eliminate the alternative permanently (or at least until the structural inhibitor is overcome). Examples of structural inhibitors include economic, family and occupational constraints. It may be argued that this alternative may have been considered in Crompton's (1992) model and information was actively sought which demonstrated to the decision maker that the alternative was not an option. The alternative would then feed back into the Excluded Set. The Unavailable Set was created for those alternatives that were also positively regarded, but are prevented from being a realistic alternative due to what Decrop calls 'situational constraints'. These constraints are more temporary in nature

than those that relate to the Dream Set and may include issues such as short term economic constraints, the lack of company and the lack of sufficient time. Finally, having identified preferable (evoked) alternatives which are available, a decision is made from that set of alternatives. While the model represents an evolution in the presentation of the process involved in destination decision making, it does not include the important behavioural element of active/inactive information search which Crompton (1992) recommends in his model.

Figure 4; Decrop's (2010) Choice Set Model

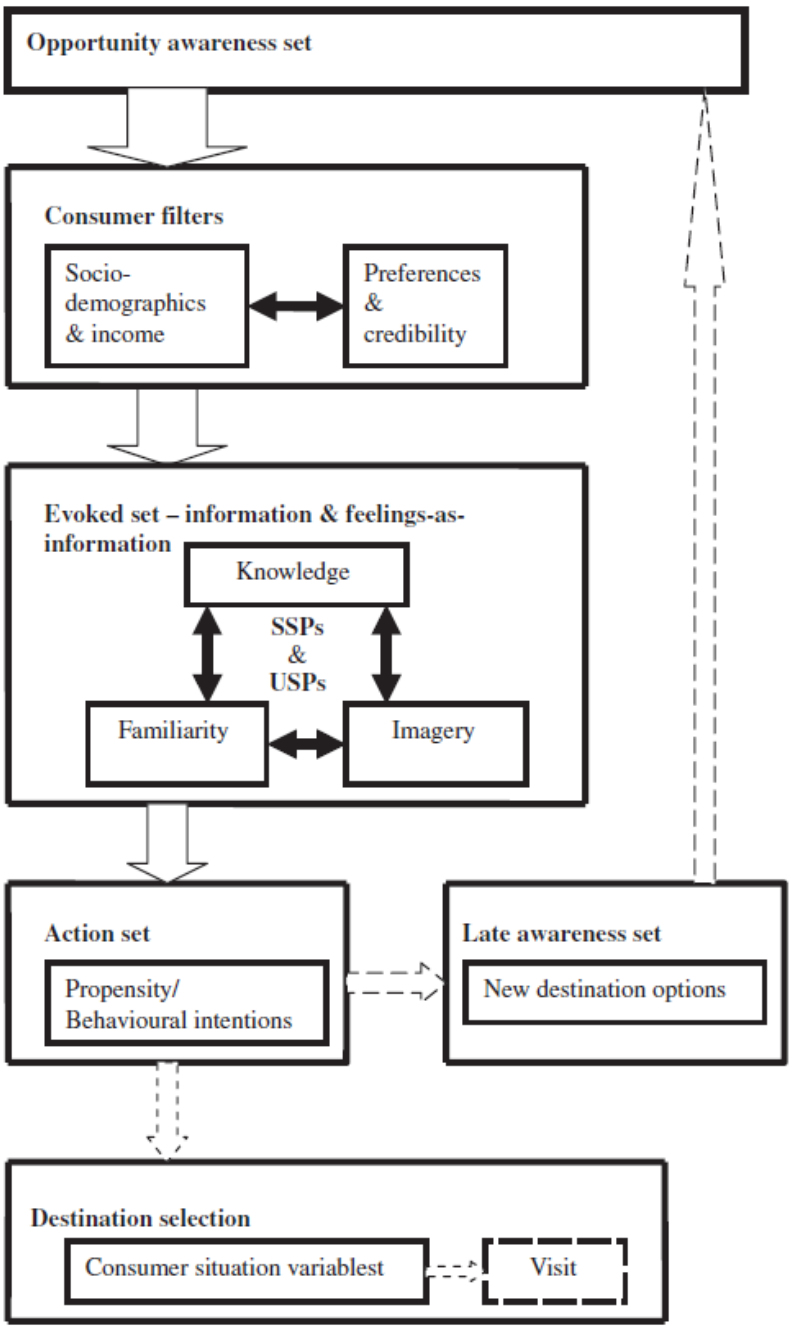


Source: Decrop (2010)

Prentice (2006) proposed a destination decision making Choice Set model which again, shares characteristics of those of Crompton (1992) and Decrop (2010) in that it has an Awareness Set, Evoked Set and Action Set. Prentice (2006), however, includes a new Set called the Consumer Filters which contains unique, person specific variables that will affect the decision making process. Within the Consumer Filters Set, socio-demographics and income variables combine with the preferences of the individual as well as the credibility that they assign to information provided about the destination to serve to eliminate some alternatives. This model provides a unique contribution to Choice Set models by involving person specific filters as well as filters concerned with the perception of the credibility of the information source. These filters, however, are not the focus of the research and are not empirically tested. However, Prentice (2006) concludes his research by stating that his findings raise the need for a reconceptualization of choice sets. Another addition to choice set

theory contributed by Prentice (2006) was the inclusion of a Late Awareness Set in the model. This is not explained or discussed and the validity of its inclusion is not tested.

Figure 5; Prentice's (2006) Integrated Choice Set Model



Source: Prentice (2006)

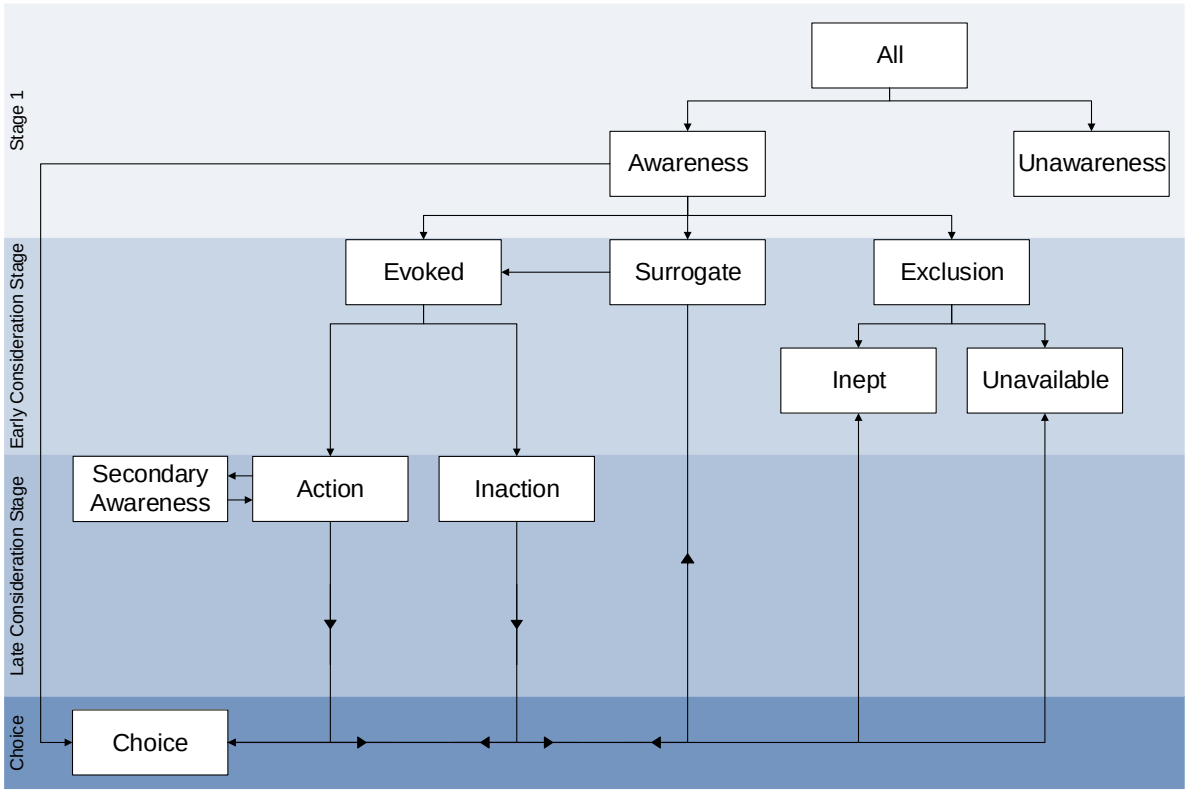
A model which combines the elements of all three Choice Set models discussed in this chapter is proposed by the researcher (Figure 6). Further justification is provided by Decrop (2010, p. 112) who stated that 'the number of and names given to the different Choice Sets may seem somewhat arbitrary'. This model aims to combine the strengths of all three models, employing the previously used choice set labels, but is most similar in appearance to those of Crompton (1992) and Decrop (2010); personal influences on destination choice remain a critical factor within this research and are discussed. The following hypotheses will be tested in relation to the Composite Choice Set Model proposed within this research:

Hypothesis 4; the Composite Choice Set Model proposed in this research (Figure 6) is an accurate representation of the mechanics of the decision making process.

Hypothesis 5; the individual choice sets within the Composite Choice Set Model are ontologically valid.

The model shares many characteristics with Cromptons' (1992) and Decrop's (2010) models such as the division of all destinations into the Awareness and Unawareness Set, then moves on to mirror Decrop's (2010) subsequent sets, Evoked, Surrogate and Exclusion. The rationale here is that this combines all possibilities succinctly, namely that alternatives may be considered to be the most favourable and included in the small, Evoked Set, or they may not be perceived positively enough, but neither are they perceived negatively therefore they are stored in the Surrogate Set. Finally, the alternatives which are seen negatively will be excluded either due to their negative connotations (making them inept) or due to structural or situational inhibitors which render them unavailable alternatives.

Figure 6; The Composite Choice Set Model



Source: Bell (2016)

The alternatives in the Evoked Set can then proceed to the Action Set, where information is actively sought in order to guide the final choice. Repeat visitors to a destination may not require the active search for information and in fact may not consider more than one destination which requires loops to be built in to the model from the Awareness Set and the Choice. However, this scenario may be exclusive to situations where no transport or accommodation is required beyond the tourists' own assets such as their own car and holiday cottage or villa. Authors such as Crompton and Ankoma (1993), Opperman (1998) and Petrick, Li and Park (2007) support the notion that some stages of the decision making process may be skipped if, for example, they are brand loyal, the decision maker has lower involvement in the process or if they have prior knowledge of the product in question. Research on the effect of prior knowledge (Johnson and Russo, 1984; Moorthy, Ratchford and Talukdar, 1997) on the decision making process supports the need for such loops eliminating the active information search process. While the Composite Choice Set model is primarily created through an amalgamation of those proposed by Crompton (1992) and Decrop (2010) the secondary awareness set is in agreement with Prentice's (2006) late awareness set and represents the possibility of destination decision makers becoming aware of new alternatives during the information search process.

Following the active information search process, alternatives will either be identified as unavailable, inept, or less preferable to the one alternative that is the ultimate choice therefore being allocated to the surrogate set. Finally, a secondary connection has also been included from the Surrogate Set to the Evoked Set for scenarios where the alternatives initially included have been eliminated through information search. Surrogate set alternatives would then be required to be considered in the same way as the alternatives that previously formed the Evoked Set.

2.6 Synthesising Choice Set Models and Decision Making Theory

Choice Set models demonstrate how alternatives are treated in the decision making process, however, they require significant interpretation to understand how the alternatives are chosen for each set. In an attempt to address this, Crompton concluded his 1992 paper by posing 'three secondary questions that have implications for the types of information that are likely to be effective in influencing individuals at each stage' (Crompton, 1992 p. 430). Crompton's (1992) first question is whether the criteria used to evaluate destination alternatives differ at each stage and his second is whether decision rules used to discard alternatives at each stage is different. Both of these questions may be answered simultaneously.

The Awareness Sets present in choice set model will normally contain a vast number of destinations that a tourist is aware of, from which a limited number must be selected to continue to the information search and evaluation stages the decision making process, i.e. the Late Consideration/Evoked Set. This limited number has been identified through empirical research (Woodside and Sherrell, 1977; Bronner and de Hoog, 1985) as consisting of 4 (± 2) destinations, implying that an extensive cull must take place during the early stages of decision making and that large numbers of alternatives will be moved from the Awareness Set to either the Exclusion or Surrogate Sets. Given the existence of large numbers of alternatives in the Awareness Set, the decisions on each alternative will have to be made succinctly before they are appraised in any detail whatsoever. The transition from the Awareness Set to the Evoked Set may actually be perceived as consisting of a number of sub-stages and involving different decision making rules and behaviour. For example, as discussed previously, cognitive science literature has suggested that two different modes of information processing exist; unconscious (system 1) and conscious (system 2). Unconscious decisions are made when the number and complexity of the alternatives overwhelm the conscious information processing ability of the decision maker resulting in the need for an initial,

automatic elimination of a number of alternatives. As Decrop (2010, p. 101) states, 'exclusion may be a function of the type of trip considered', therefore many alternatives may never enter consideration due to an obvious inappropriateness (the contrast between ski resorts and beach destinations illustrate how specific requirements may be satisfied by one but not the other). The remaining alternatives (of which there may still be many) are then subject to conscious appraisal, at least at a perfunctory level.

Process tracing literature has shown that in situations involving large numbers of complex alternatives, non-compensatory strategies are initially adopted to make an initial reduction of the numbers due to the simplicity of the required cognitive process in comparison with compensatory strategies. Consistent with this philosophy of fast and frugal decision making, lexicographic decision making strategies should be the first to be applied through the appraisal of criteria such as accessibility which may be objective in nature, i.e. they either do or do not prevent the destination from being a viable option.

Following on from this, the decision maker is left with destination attributes that are subject to taste and preference and may be described as subjective. If the list of destination alternatives at this stage is still extensive enough to challenge and exceed cognitive ability to conduct detailed assessment of each, literature on heuristics suggests that the alternatives are retained or eliminated based on the decision makers' assessment of priority attributes. The decision maker will have an internally constructed value system which informs their perception of destination attributes and creates a minimum acceptance level; destinations with key, non-compensatory attributes that fail to meet the decision maker's minimum acceptance levels will be excluded from further consideration. Decrop (2010, p. 99) provided an example of this Elimination by Aspect strategy in his longitudinal study of Choice Set formation by quoting a respondent as saying that she excluded Asian countries from consideration for her summer vacation because of the hot climate. For her, this single, immutable attribute was sufficient to rule out a large number of alternatives.

Having identified destinations that are available and that also meet the minimum requirements, an appraisal of the remaining alternatives must be made based on attributes which are considered compensatory such hotel location, quality and cost. Heuristic strategy literature describes this judgement of compensatory attributes as the weighted additive rule. The decision makers' judgement of these compensatory attributes will allow them to create a manageable Evoked Set,

normally consisting of the (4 ± 2) alternative that are perceived to have the highest net satisfaction levels from which a more in depth appraisal and comparison of attributes may take place to result in the single alternative which is most preferable.

Returning to Crompton's first two questions (whether the criteria used to evaluate destination alternatives differ at each stage and whether decision rules used to discard alternatives at each stage is different), by comparing the two Choice Set models and applying research on Heuristic Strategies and Process Tracing, it can be seen from existing literature that first, the criteria used to evaluate destination alternatives does change from those aspects which are prerequisites for travel to those that are merely preferable. Secondly, it can also be seen that the decision rules used to discard alternatives also change from non-compensatory to compensatory in tandem with the criteria. Initially, the relatively large list of alternatives may be screened by relatively simple, non-compensatory strategies beginning with Lexicographic heuristics, followed by Elimination by Aspetc. Once the list of alternatives has been reduced to those which are available and that meet the acceptable minimum standard, the relatively small number of remaining alternatives judged based on a relatively complex heuristic which appraises all of the relevant attributes to create a ranking of preferred choices. The idea that different heuristic strategies applied at the different stages of decision making is supported by Decrop (2010) who states that initial the elimination of alternatives is achieved 'through the use of simple heuristics' (Decrop, 2010, p. 95) and subsequently, final selection is made 'based on more elaborate heuristics' (Decrop, 2010, p. 95).

Research conducted by Perdue and Meng (2006) also suggest that the heuristic strategies change as the number of choice alternatives is reduced though the decision making process. Their findings were that the reasons for destination rejection were different to the reasons for destination selection, i.e. ski resorts were rejected because they were too expensive or inaccessible, but from the remaining alternatives, choice was made based on snow quality and mountain characteristics. In their research they conclude that 'factors affecting inclusion in the consideration set may not be the same as the factors influencing the final choice' (Perdue and Meng, 2006, p. 347). Their paper ends by saying 'obviously, further research is needed to examine this conjecture (Perdue and Meng, 2006, p. 347). No such research has yet been conducted, therefore the following hypothesis will be tested:

Hypothesis 6: non-compensatory heuristic strategies are applied at the Early Consideration Stage, and compensatory heuristics are applied in the Late Consideration Stage.

The third question posed by Crompton (1992) asks whether types of information and their sources change during the choice set funnelling process. Using Crompton's own model, it can be seen that the Awareness Set will be populated from internal information, i.e. from memory. In the following stage, where alternatives must be allocated to the Evoked, Surrogate or Exclusion Sets, information may also come from external sources, but they will be passive in nature as active information search has not yet begun. Mass media, word of mouth (both external) and prior knowledge (internal) are all examples of information sources which may influence the formation of choice sets at this stage. Having created a small Evoked Set, the decision maker finally engages in active, external information search in order to make informed decisions on the alternatives considered (Crompton, 1992). Active external information sources may be both commercial and non-commercial and a consumer using a mixed information source strategy is likely to engage with both types of source to minimise the risks associated with the final decision (especially the performance risk).

Although Crompton appears to answer his own question, beyond identifying internal/external, passive/active and potentially commercial/non-commercial sources, it remains somewhat ambiguous as to which specific sources of information are used at each stage. Even within the external, active, commercial category, the range of information sources is extensive. Compounding this ambiguity is the migration of many types of information onto the Internet creating a variety of sources through that single medium adding a new dimension to information distributors. Agents and representatives are now heavily active online in the tourism industry, as are independent commercial organisations such as Lonely Planet and third party users who utilise the functionality of 'Web 2.0'. Understanding the role of information sources used during the decision making process is vital to destination authorities operating in a highly competitive market. Dellaert *et al* (1998), for example, conducted research on the sequence of holiday element decisions (destination, accommodation, mode of travel etc..) and found that sequential communication of element attributes may be more effective in interacting with potential tourists, but also suggested that there are benefits in 'bundling' information on several aspects together. Stronger guidance would benefit destination management organisations.

2.7 Chapter Summary

Where consumers are faced with numerous complex choice alternatives, the decision making (decision making) process becomes extended due to the existence of significant levels and types of risks involved in the decision. These risks are created through the combination of uncertainty and the severity of the consequences of making a wrong choice. While extensive information search may reduce the level of uncertainty, due to limitations in human cognitive processing capacity, heuristic or decision making strategies must be employed to eliminate alternatives to create a reduced, manageable set of alternatives to actively research. Further decision making strategies are required to arrive at a final choice. At the active information search stage of the decision making process, literature suggests that the type of information sources available (commercial/non-commercial, personal, non-personal) have characteristics which make a significant difference to the decision makers' perspective and therefore, their subsequent role in the decision making process. These characteristics and the decision makers' perception of the sources were analysed in the primary research of this project and the results summarised in Chapter 4.

Furthermore, the literature has revealed a salient group of decision making models termed choice set models which present the stages of destination decision making comprehensively. Two of the most prevalent examples of CS models are those put forward to Crompton (1992) and Decrop (2010), both of which include valid sets or stages that the other does not. A composite Choice Set Model based on both the work of Crompton (1992) and Decrop (2010) was therefore created in order to allow for further investigation into the role of information sources used during the destination decision making process.

2.7.1 Gaps in Literature to be Addressed

As a result of the literature review, gaps in the literature that are to be addressed in this research were identified and are presented in Table 4 below, along with evidence to support the existence of the gap and the implications on both the research agenda and industry practice.

Table 4 - Gaps in the Literature to be Addressed

Hypothesis	Gap	Source	Implication
	Empirical research which explores information use patterns within the structure of the decision making process.	Choi *et al* (2012)	The understanding of which information sources play a role at different stages of the decision making process as well as what that role is is not based on empirical research and is therefore unreliable.
H1 & H2	'This present study has raised the need for a reconceptualization of evoked and action sets in tourism'. 'The number of and names given to the different CS's may seem somewhat arbitrary'.	Prentice (2006, p. 1168) Decrop (2010, p. 112)	The ontology of choice set models is still in need of development. Without clearly defined stages of a choice set model and clearly defined sets within the model, their reliability will be limited.
H3	The heuristic strategies applied at the early and late consideration stages are different; 'reasons for selection may be necessary conditions to get into the consideration sets, while reasons for rejection reflect the actual choice. Obviously, further research is needed to examine this conjecture.'	Perdue and Meng (2006, p. 347)	The reasons for specific destinations being rejected prior to being actively researched is important for information providers to understand in order to optimise their chance of being selected. It is the same for understanding the reason and decision strategy employed when a destination is ultimately chosen.
	Lack of understanding of the perceived utility of information sources, both in terms of a definition and as a construct.	Nusair (2013), Lam and McKercher (2013), D'Alessio (2015)	Understanding what is meant by perceived utility, why sources are seen as useful or not and what contributes to them being seen as useful is important to the information providers. Without a clear understanding of perceived utility, decisions on source utilisation within marketing may be flawed.
H4	Whether perceived utility of information sources is significantly correlated with its use in the decision making	Nusair *et al* (2013, p. 20)	If the perceived utility of information sources does not affect whether destination decision makers engage with

	process. As a result of their research, Nusair *et al* (2013) suggest that information channels (Online Social Networks) increase the benefits that they are seen to provide travelers to increase their use. This research does not extend to other information sources used in the destination decision making process.		them or not, the value of understanding perceived utility values for each source is diminished. Conversely, if PUS is correlated to source usage, PU is an important facet of marketing communication to understand.
H5	Research on the impact that different information sources have on the destination decision making process is limited to a very small number of sources rather than a wider range that may realistically be used in conjunction. For example, Molina and Esteban (2006) researched different types of brochure/brochure content and found differences in decision outcome. Contemporary research linking information source and choice is limited to social media and even then one type. Jacobsen and Munar (2012)	Molina and Esteban (2006); Jacobsen and Munar (2012)	Marketing managers need to understand the impact that information source choice has on the effectiveness of their advertising. Advertising through the wrong source may waste resources and even have the opposite of the desired effetc.

Chapter 3 - Research Methodology

3.0 Overview of Chapter

This chapter will provide a justification of the research methods and research methodology that was applied within this study. It will describe and justify the ontological and epistemological perspectives as well as the axiological standpoint from which understanding is developed. This chapter will also identify and critically analyse the philosophy, research strategy and the specific research methods that have been applied in order to achieve the aim set out in Chapter 1. The reliability and validity of the research will also be discussed together with the sampling design, including the sample type and size.

3.1 The Nature of Research

Identifying the nature of the research to be conducted is a good starting point when considering the methodology that will be applied. According to Sekeran and Bougie (2013) research studies can either be exploratory, descriptive or causal 'depending on the stage to which knowledge about the research topic has advanced' (Sekaran and Bougie, 2013, p. 96). According to Cooper and Schindler (2003), exploratory studies predominantly occur where little is known of the problem and often rely on secondary research. Exploratory research also tends to have less structure and more flexible methodologies as new insights uncovered by the research may require a change of direction (Saunders *et al*, 2012). Descriptive studies are more structured as they are 'designed to gain an accurate understanding of events, persons or situations' (Saunders *et al*, 2012). Descriptive studies have clearly stated hypotheses which are tested in order to create descriptions of phenomena or to discover associations among variables. Part of this study aims to identify the path that choice alternatives take through the decision making process. This identification will be descriptive in nature. Although Cooper and Shindler (2003) assert that descriptive research can be complex and demanding of research skills, other authors such as Saunders *et al* (2012) and Sekaran and Bougie (2013) state that descriptive research should be a means to an end rather than an end in itself and that an analysis of the cause of the association between variables is important.

Studies which attempt to understand the reasons for relationships existing between variables are called casual studies. Developing an understanding of why different information sources are used at different stages of the decision making process is also an intention of this research. Saunders *et al* (2012) state that studies that utilise description as a precursor to an explanation of the causality (as is the case with this research) are called descripto-explanatory studies. As one of the objectives of this research is to investigate which information sources are used at different stages of the decision making process and then to critically evaluate the reasons for their use, a descripto-explanatory nature has been adopted for this study.

3.1.1 The Research Paradigm

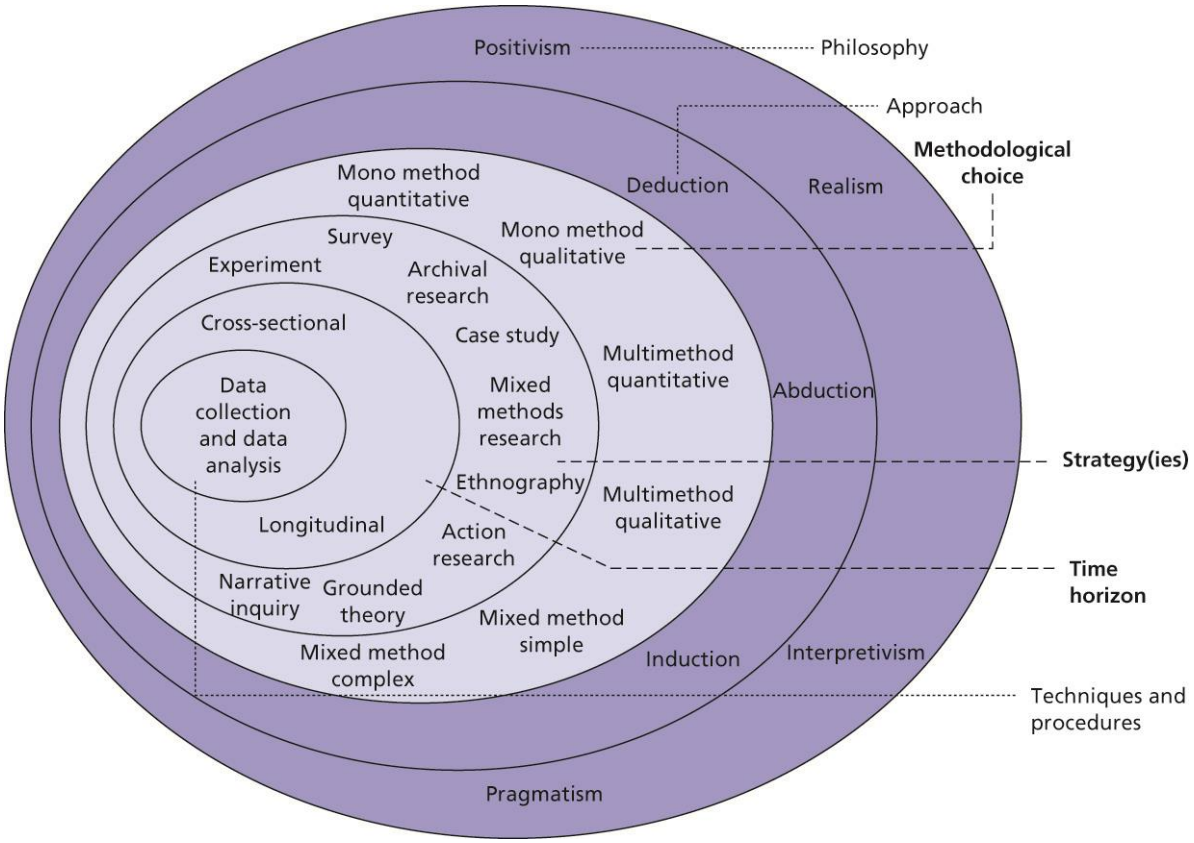
It is important that the distinction between the research methods and the methodology is identified in order to establish their boundaries and the concepts that lie within each domain. Many authors (e.g. Adams, 2007; Saunders *et al*, 2012) agree that the term 'research methods' simply refers to the way in which data is collected and analysed for a study. Saunders *et al* (2006), however, believe that the research methods adopted are of secondary concern to identifying the research methodology, which underpins the overall study.

Research methodology refers to the underlying philosophical and theoretical assumptions that both constrain and provide a platform for the overall research conducted. The methodology applied to a research study should identify and describe in detail the research paradigm that is the foundation for the overall process. Guba and Lincoln (1994, p. 105) describe the research paradigm as 'the basic belief system or world view that guides the investigation' and which is influenced if not dictated by the ontological and epistemological convictions of the researcher. Saunders *et al* (2012) argue that the research paradigm or philosophy should be considered before a researcher goes on to consider the research methods, as shown in their research onion (Figure 7). The research onion is a useful depiction of the epistemological (i.e perspectives on the theory of knowledge) and ontological (i.e. perspectives on the theory of existence) alternatives that must be considered in the research design process.

Whereas objective subjects such as the natural sciences tend to have one prevailing paradigm (e.g. positivism), social science has been described as 'pre-paradigmatic' (Bryman, 2005, p. 322) as no

pre-eminent paradigm has emerged. One research paradigm often identified in the literature (Saunders, 2000, Blaickiem 2009), is positivism (a.k.a. scientific, rationalistic and empiricism) which shares the fundamental belief of natural scientists that events reflect a reality and the identification of which 'is uncontaminated by any theoretical notion' (Blaikie, 2009, p. 98): it assumes that 'the researcher's values neither affects or is affected by the subject of the research' (Remenyi *et al*, 1998, p. 33). Key characteristics of this paradigm are the 'quantifiable observations that lend themselves to statistical analysis' (Saunders, 2000, p. 85). Criticism of the positivism paradigm includes the argument that it is too superficial and only concerns itself with associations between variables instead of causality. The second major criticism is that positivism only acknowledges phenomena which are directly observable and dismisses abstract or unobservable phenomena as irrelevant. As a result, positivism fails to consider the influence of the way that people (including the researcher) think and feel about the subject being researched (Cavana *et al*, 2001). Creswell (2013, p. 84) challenges the positivist paradigm stating that 'we can never be positive about our claims of knowledge when studying the behaviour and actions of humans'.

Figure 7; Saunders et al's (2012) Research Onion



Source: Saunders *et al* (2012)

Contrasting with positivism is the interpretivist paradigm (a.k.a. naturalistic, constructivism or phenomenology). Interpretivism is axiologically rich in that the presuppositions and values of the researchers will strongly influence the way in which data is interpreted. According to Cavana *et al* (2001, p. 9), interpretivists regard reality as a social construct and 'the world is largely what people perceive it to be', and therefore the key characteristic of this paradigm is the focus on these perceptions of social actors. Interpretivism has also been criticised; Cavana *et al* (2001) assert that it is too subjective, too focused on micro level or short term events, while Blaikie (2007) asserts that there is more to reality than that which is contained within the social actors' construct of it. Positivism represents one extreme of the paradigmatic continuum, which has interpretivism at its extreme other end (Hussey and Hussey, 1997). A summary of the two paradigms are presented in Table 5.

Table 5; Comparison of the Contrasting Research Paradigms

	Positivism	Interpretivism
Assumptions	Objective world which science can measure and 'mirror' with privileged knowledge	Intersubjective world which science can represent with concepts; social construction of reality
Aim	To discover universal laws that can be used to predict human activity	To uncover socially constructed meaning of reality as understood by individual or group
Stance of researcher	Stands aloof from research subjects so that decisions can be made objectively	Becomes fully involved with research subjects to achieve full understanding of subjects' world
Values	Value free; their influence is denied	Values included and made explicit
Types of reasoning	Deductive	Inductive
Research plan	Rigorous, linear and rigid, based on research hypothesis	Flexible and follows the information provided by the research subject
Research methods and types(s) of analysis	Experiments; questionnaires; secondary data analysis; quantitatively coded; documents statistical analysis	Ethnography; participant observation; interviews; focus groups; conversational analysis; case studies
Goodness or quality of criteria	Conventional benchmarks of rigour; internal and external validity; reliability and objectivity	Trustworthiness and authenticity

Source: Cavana *et al*, (2001, p. 187)

According to Henderson (2011, p. 341) 'the traditional approach to science was that positivism and interpretivism were distinct ways of knowing.' Henderson's (2011) conclusion in relation to research in the leisure industry is that the exclusive application of pure positivism or interpretivism is problematic and largely inappropriate. Given the descripto-explanatory nature of this research - identifying the role of information systems used during the vacation decision making process – it may not be possible through the sole application of pure positivist or interpretivist research paradigms. Identifying which information sources are used by a subject during each stage of the decision making process is essentially an objective goal and therefore interpretivism is inappropriate. However, when rationalising why decision makers use different information sources at different stages of the decision making process, a positivist philosophy is inappropriate due to its exclusion of the influence of human feelings on behaviour.

Saunders *et al* (2012) depict two additional research paradigms within their research onion: realism and pragmatism. Realism is similar to positivism in that it assumes that 'objects have an existence independent of the human mind' (Saunders *et al*, 2012, p. 136). However, while 'positivist conceptions of science only consider things to exist if they are directly observable' (Lee and Lings, 2008 p. 31), realism understands that objects can still exist even if they cannot be directly measured. According to Lee and Lings (2008), realism allows for theories to be established on phenomena which are unobservable directly through the observation of causal phenomena. Lee and Lings (2008) use the example of motivation being measured through class attendance; motivation being the abstract, unobservable phenomena and attendance being the physical manifestation through which it can be measured.

Saunders *et al*'s (2012) fourth paradigm, pragmatism, differs from positivism, realism and interpretivism as it centres on the belief that more than one philosophical position may be adopted to find solutions to (research) problems and that such pluralist approaches which engender objective and subjective methods may generate 'different perspectives, ideas and theories which help us to gain an understanding of the world' (Sekaran and Bougie, 2013, p. 30). Pragmatists do not necessarily adopt mixed methods in their research, but recognise that unless the research question suggests a particular paradigm unambiguously, then there may be more than one research paradigm that is appropriate (Saunders *et al*, 2012).

The final paradigm of relevance to this chapter is post-positivism. Although post-positivism, like positivism, is 'based on careful observation and measurement of the objective reality that exists "out there" in the world' (Creswell, 2013, p. 6), post-positivism recognises that the values of the researcher cannot entirely be excluded from the research project that they undertake and also that absolute truth can never be found. Whilst acknowledging these limitations, post-positivism attempts to uncover the laws that govern the world. According to Creswell (2013), the key assumptions of post-positivism are as follows;

1. Knowledge is conjectural and absolute truth can never be found.
2. Research is the process of making claims (hypotheses) and then refining or abandoning them.
3. Data, evidence and rational considerations shape knowledge. In practice, the researcher collects information on instruments based on measures completed by the participants or by observations recorded by the researcher.
4. Research seeks to develop relevant, true statements, ones that can serve to explain the situation of concern or that describe the causal relationship of interest.
5. Being objective is an essential part of competent enquiry; researchers must examine methods and conclusions for bias.

If one reconsiders the objectives of this research (testing the ontological legitimacy of individual choice sets as well as the composite choice set model as a whole, identifying whether information sources were used by destination decision makers and identifying the perceptions of information sources), post-positivism was an appropriate philosophy as hypothesis have been formed, objectivity is required, but the role of humans in the data collection process is acknowledged. The post-positivist philosophy was therefore adopted for this research; the significant advantage of adopting this philosophy was the acceptance of and subsequent analysis for latent bias within the research process in order to eliminate it wherever possible and to ensure the validity of findings.

3.1.2 Approach

Following on from the identification of the paradigm that underpins this study, the research approach must be considered. Lee and Lings (2008) identified two approaches to research:

deductive and inductive. According to Lee and Ling (2008, p. 6), 'deduction is the process of drawing conclusions from rational and logical principles'. These conclusions manifest themselves as researchers' theories and hypotheses which need to be tested through data collection and analysis in order to corroborate or reject them. Given the nature of social science, deducing theories about human behaviour is common, however, we cannot be certain that these theories are true until they are tested (Lee and Lings, 2008). Blaikie (2010) describes the deductive research approach as consisting of six steps;.

1. Put forward a tentative idea, a premise, a hypothesis or set of hypotheses to form a theory.
2. By using existing literature or by specifying the conditions under which the theory is expected to hold, deduce a testable proposition or number of propositions.
3. Examine the premises and the logic of the argument that produced them, comparing this argument with existing theories to see if it offers an advance in understanding. If it does, then continue…
4. Test the premises by collecting appropriate data to measure the concepts or variable and analysing it.
5. If the results of the analysis are not consistent with the premises (the tests fail!) the theory is false and must either be rejected or modified and the process restarted.
6. If the results of the analysis are consistent with the premises, then the theory is corroborated.

Given that deductive research is designed to corroborate or reject the hypotheses stated before empirical research began, it is critical that research methods are designed carefully in order to ensure that the research tests the hypotheses in a reliable manner and that the results are not influenced by unwanted externalities. This need for explicit constraints in the methodology and methods demonstrates both the advantage and disadvantage of a deductive research approach; while it is excellent in testing theories that were invented or borrowed (Blaikie, 2010), its 'rigid methodology does not permit alternative explanations of what is going on' (Saunders *et al*, 2012, p. 146), i.e. the hypotheses are either corroborated or rejected; new theories are not intended to be produced. With the inductive approach, this disadvantage is avoided, but replaced by others.

The inductive approach is a process whereby observations of phenomena are made first, then theories are put forward based on these observations. Saunders *et al* (2012) argue that the inductive

approach allows theories to be formed that more accurately explain the cause of certain phenomena as there are no hypotheses in place which must be addressed in relation to the outcomes. Induction as an approach to research has been criticised and inconclusive debates have continued for decades (e.g. Popper, 1959, Salmon, 1967, Miller, 1994). One major concern of the inductive approach is that as theories are based on observations, how many observations must be made in order to produce valid results? The classic illustration of this problem is the example of an observer seeing 100 white swans and concluding that all swans are white. The second major problem with induction is the question of how wide the range of circumstances must be to produce valid results. Theories based on observations of humans made in one location at one moment in time, for example, may not hold true for the behaviour of humans in another time and place.

According to Balikie (2010), the inductive and deductive approaches to research are not mutually exclusive and in fact, research projects can benefit from a combination of the two. Lee and Lings (2008) and Sekeran and Bougie (2013) describe how a relationship between these two apparently contrasting research approaches can exist. They state that observations may stimulate thought on why the observed phenomenon exists. That thought may crystallise into a notional theory which would require empirical testing in order to corroborate or reject the theory. If these tests corroborate the theory, the induction – deduction process is complete. If the tests serve to reject the theory, the results of the test represent new observations which may lead on to a new theory being formed which requires testing.

Saunders *et al*. (2012) discuss a third approach to research: abduction. This approach answers the 'what' question as well as the 'why' questions. Saunders *et al* (2012, p. 147) describe abduction as 'moving back and forth' between deduction and induction in a way similar to that described by Lee and Lings (2008). Blaikie (2010) expands on the description of the abductive by identifying the many layers involved. Initially the researcher is required to 'discover why people do what they do by uncovering the largely tacit, mutual knowledge, the symbolic meanings, intentions and rules, which provide the orientation of their actions' (Blaikie, 2010, p. 89). The second stage of the abductive process is to articulate these un-reflected behaviours in ways that satisfy the need for generalisations in the research community but simultaneously, in a way that the research subjects recognise. The third stage is to develop the understanding of the phenomena in question. Abduction is not appropriate for this research because 'the principles of abduction are based on the notion that

there no *a priori* hypotheses, no presuppositions, no theorising in advance' (Levin-Rozalis (2004, p. 9),

Given the volume of literature on both the consumer decision making process and tourist information sources summarised in chapter 2, a number of logical hypotheses have been formed. This leads the researcher to naturally follow a deductive approach when devising the methodology. It can also be argued that the deductive approach is more consistent with the descripto-explanatory nature of this research whereas induction is more consistent with exploratory research where theories and hypothesis are established through observation. The inductive approach is not entirely superfluous given that this research aims to address a gap in the literature, i.e. that 'there has been no empirical research attempting to explore information use patterns within the structure of the decision-making process in the tourism literature' (Choi *et al* 2012, p. 26), the author must be aware that theories may emerge from the data in line with the inductive approach.

3.2 Research Design

Having formed a clear understanding of the nature of this research project and the epistemological perspective that has been adopted, the design of the research can be considered. Cooper and Schindler (2003, p. 146) describe research design as 'the blueprint for the collection, measurement and analysis of data' and identify five essentials of research design.

1. The design is an activity and time based plan.
2. The design is always based on the research question.
3. The design guides the selection of sources and types of information.
4. The design is a framework for specifying the relationship among the study's variables.
5. The design outlines procedures for every research activity.

Saunders *et al.,* (2003) propose the following framework for deciding upon a research design.

1 Return to the research question/s and objectives; decide on a research paradigm;

2 Decide upon a research strategy *i.e.* what approach/es and method/s will be used to gather the data; consider strategies used in extant studies;

3 Consider the constraints on the research and the possible preclusion of specific strategies;

4 Consider the possibility for, and advantages of, combining different research methods;

5 Identify the threats to reliability and validity contained in the research design.

According to this framework, the second stage of research design is to decide on how to gather data. Data may be primary, secondary or tertiary (Blaikie, 2012). Primary data is that which has been generated by the researcher, secondary data is that which has been generated by another researcher and tertiary data is that which has been collected and summarised by another researcher. Unless the researcher has access to original data sets, data that has been summarised, manipulated or categorised is considered to be tertiary (Blaikie, 2012). According to Saunders *et al* (2009), secondary data has the disadvantage of being collected to achieve research objectives that do not match those of the current research – this may also have a detrimental effect on the way that data is presented. Conversely, secondary data has the advantage of being unobtrusive, requiring fewer resources to collect than primary data and facilitating the contextualisation and comparison of primary data as well as the overall research. Secondary information and tertiary data has been included in the literature review to guide the research, identify gaps in the research agenda and to facilitate the formation of several hypotheses. They were also used to inform the methodology, the design of the research instrument and to provide a context within which to compare the research findings. Consideration was given to the way in which primary data was collected as well as the type of primary information that is most appropriate. Initially, the researcher needed to decide between monitoring or interrogation/communication data collection methods. As this study is based on decision making behaviour which takes place in private areas such as in people's homes, monitoring was not a viable option. Respondents were invited to participate in the research, implying that an interrogation/communication method is necessary.

3.2.1 Quantitative or Qualitative Methods?

Primary data has two forms; quantitative and qualitative. Saunders *et al* (2012, p. 161) state that:

> *''Qualitative' is often used as a synonym for any data collection technique or data analysis procedure that generates or uses non-numerical data and that 'quantitative' is often used as*

a synonym for a data collection technique or data analysis procedure that generates or uses numerical data".

Walle (1997) states that the quantitative approach is rigorous and scientific, whereas the qualitative approach is less rigid and employs flexible tools of investigation. Saunders *et al* (2012) argue that qualitative research is generally associated with an interpretive philosophy as the focus is on the subjective opinions of respondents. Neuman (2011) states that qualitative research is more appropriate for exploratory research, where an inductive approach is required to gain a richer understanding of the context before theories and hypotheses can be created. By comparison, Saunders *et al* (2012) state that quantitative research is generally associated with the (post) positivist philosophy and the deductive approach as the highly structured methodology allows for the objective testing of prescribed hypotheses.

The identification of the information sources that are used at each stage of the decision making process does not call for rich data; objective data collected from large numbers of respondents is more valuable to in order to increase the validity of the findings. The implication of this is that quantitative research is the most appropriate approach given the nature of this study. Lee *et al* (2007) applied a quantitative approach to data collection and data analysis when researching their paper entitled 'Tourists Search for Different Types of Information'. Money and Crotts (2003) also used quantitative collection and analysis techniques in their research on 'The Effect of Uncertainty Avoidance on Information Search, Planning and Purchase of Travel Vacations'. Indeed, quantitative research is the most prevalent approach adopted when studying vacation decision makers' choice of information search. This also supports the argument for adopting quantitative techniques for this research. The quantitative data collection method is also consistent with the Post Positivist philosophy and the deductive approach, thus adding support to the adoption of this method within this research.

However, consideration has been given to the part of this research which intends to identify why specific information sources are used at different stages of the decision making process. This is distinct from attempting to identify why consumers search for information when faced with decisions which involve risk. As has been discussed in Chapter 2, in purchase situations which involve risk, (such as those relating to the vacation decision) risk is reduced through reducing uncertainty

(Quintal *et al*, 2010), and uncertainty is reduced through the acquisition of information. Chapter 2 also discusses the way in which different information sources are perceived by the decision maker and the influence of this perception on information source engagement. Commercial sources, for example, are perceived to hold more risk due to the lower levels of trust attributed to them by the decision maker (Money and Crotts, 2003). Personal information sources which generate information for the decision maker in response to their enquiry can provide more detailed information than non-personal information sources which only contain generic information. The perceived benefits and drawbacks of the individual information sources have been established in previous research; the key issues being trust (that the information is honest and unbiased), the accuracy of information they provide (how up to date it is), the accessibility of the information source and the financial value that they offer. While this has already been established, it will be beneficial to identify whether the perceptions of the respondents of this research are consistent with general theory; therefore it is necessary to include what Saunders *et al* (2012) call 'qualitative numbers'. The extent to which respondents agree with previous research findings about the trustworthiness, accuracy of information, accessibility and financial value offered by information sources can be gathered numerically through rating questions.

Consideration has also been given to the most appropriate technique for testing the composite decision making model presented in Chapter 2. Decrop (2010) adopted a longitudinal, qualitative research technique to investigate the formation of choice sets within the vacation decision making process, whereas Crompton's (1992) paper presented a model which summarised widely agreed choice sets into a theoretical decision making process model. Both models provided explanations as to why vacation choice alternatives were either rejected or included for further consideration along the decision making process. The choice sets in the composite model put forward in this research represent an amalgamation of the two models upon which it is based, and combines the explanations to create a comprehensive description of the dynamics of choice alternatives within the decision making process. The composite model is hypothetical and tests were be applied as part of the primary research to discern whether choice alternatives are rejected or included for further consideration in accordance with the framework or not. This was achieved through a series of closed questions, i.e. those in which a predetermined set of responses is presented to the respondent. For example, according to the composite model that was tested, choice alternatives are excluded from the active information search stage because they are unavailable, inept or otherwise inferior to the alternatives being researched.

There are four types of data that can be collected through the quantitative technique: nominal, ordinal, interval and ratio. Nominal data are a type where information can be categorised and the categories are 'mutually exclusive and collectively exhaustive' (Cooper and Schindler, 2003, p. 223). Examples of nominal data required in this study are gender and whether a respondent used a particular information source or not. Although nominal data are the weakest of the four types they suggest no order, no distance relationships and have no arithmetic origin (Cooper and Schindler, 2003, p. 225), they can be useful to identify patterns in data. Differences in levels of education have, for example, been found to influence the decision making process (Park, Wang and Fessenmaier 2011), giving rise to the need for such nominal data. Ordinal data also enable information to be categorised, but unlike nominal data, the categories can be put in a ranked order. However, ordinal data must follow the transitivity postulate (i.e. that if *a* is greater than *b* and *b* is greater than *c*, *a* must be greater than *c*) and the differences between the categories may vary (*a* may be a lot greater than *b*, but *b* may only be a little greater than *c*). Agreement scales are commonly used in social science research to obtain 'qualitative numbers' as Saunders *et al* (2012) describe them. Agreement scales are effective tools for identifying constructs such as the level of trust ascribed to an information source by a decision maker. Interval data, like ordinal data, is also put in ranked order; however, unlike ordinal data the intervals between the categories are equal. Temperature is the classic example of interval data; the difference between 10 and 20 degrees is the same as the difference between 20 and 30 degrees. Because interval data has consistency between the categories, unlike nominal or ordinal data, it allows for the calculation of the mean value which in turn allows for greater statistical testing (Lee and Lings, 2008). We cannot say, however, that 20 degrees is twice as hot as 10 degrees as the zero point is arbitrary and not a true zero. However, where Likert-type scales are correctly designed, e.g. with balanced options from 'Strongly Disagree' (1), 'Disagree' (2), 'Neither Disagree Nor Agree' (3), 'Agree' (4) and 'Strongly Agree' (5)', all labelled and numbered, the responses are widely regarded in social science as interval data (Nardi, 2003; De Vellis, 2012). Ratio data incorporate all of the powers of previous data types plus the provision of absolute zero or origin (Cooper and Shindler, 2003, p. 228). Saunders *et al* (2012) use income as an example of ratio data and state that if profits are $300,000 one year followed by $600,000 the next, it can be said that profits have doubled because there is a true zero.

According to Lee and Lings (2008), the data type that is collected is guided by the information sought. It is normally recommended to use the most precise scale possible, but 'it's usually the case

that more powerful scales are harder for respondents to fill in' (Lee and Lings, 2008, p. 147). This is why it is important to understand what will be done with the data before it is collected.

3.3 Data Collection

3.3.1 Quantitative Data Collection

According to Blaikie (2010), the most common forms of quantitative data collection are the self-administered questionnaire and the structured interview, however, these can be somewhat ambiguous terms. Both are types of surveys which, according to Neuman (2011) are appropriate for research with a descriptive or explanatory nature such as this. 'Structured interviews use questionnaires based on a predetermined and 'standardised' or identical set of questions' (Saunders *et al*, 2010). The structured interview method of data collection encourages reliability due to the standardisation of both the way in which questions are asked and the way in which answers are recorded (Bryman, 2012). Structured interviews can also reduce reliability problems associated with the misinterpretation of questions as the interviewer is present and can explain terminology or concepts if necessary. However, structured interviews also provide an opportunity for the existence of bias on behalf of the interviewer, and interviewers are advised to try to use the same tone of voice when administering each question of each interview. There is also concern that as this type of data collection involves social interaction, respondents may provide more socially acceptable answers rather than more honest answers. This is a critical concern to research rooted in the post-positivist philosophy which, while recognising the role that humans play in social research, strives to eliminate subjectivity of any kind from the research process. In order to minimise unwanted externalities caused by human interaction an online, self-administered questionnaire was selected as the most appropriate data collection tool as it is universally accessible and eliminates the need for personal distribution. The rationale for the use of an online questionnaire is discussed in further detail later.

3.3.2 The Questionnaire

Given the research objectives presented in Chapter 1, the three key elements of this piece of research are seen to be: (i) the descriptive accuracy of the composite choice set model; (ii) the decision maker's perception and subsequent influence of information sources and (iii) the role of

information sources at each stage of the decision making process. The questionnaire created as the data collection instrument for this research has been through a number of design processes based on the considerations in section 3.4.1. Questions were designed based on the literature review which establishes current understanding and identifies gaps in the research agenda (see Appendix 2 for questionnaire). The questions addressed the focal areas of the research; the composite Choice Set model and the role of information sources.

3.3.3 Questionnaire Design

When designing a self-administered questionnaire there are several key areas which must be carefully considered in order to ensure that the responses collected are reliable. The length, layout and wording of the questionnaire as well as the question order can all create impediments to data collection and analysis if they are designed inappropriately. Lee and Lings (2008) opine that the length of the questionnaire is the most important design consideration. Long questionnaires may create respondent fatigue and non-completion, however, according to Cooper and Schindler (2003), research does not support this general assumption. There is no specific guidance on exactly how long a questionnaire should be; there are too many variables such as the requirements of the research, the context of the completion and the value of the research to the respondents. Commercial questionnaires which are randomly mailed to customers, for example, must be very short in order to garner a significant number of responses. If the organisation is paying for responses, the length may be increased. The response rate for academic questionnaires may be dependent, to some extent, on the value of completion to the respondent, the quality of the covering letter or the incentives provided to encourage participation in the data collection. General guidelines and common sense encourage the designer of the questionnaire to make the questionnaire as concise as possible whilst fulfilling the requirements of the research subject.

The layout is one aspect of questionnaire design that may affect the length in terms of the number of pages, but it will not have an equal effect on the length in terms of duration which is of more import to respondents (Lee and Lings, 2008). Layout considerations fall into two distinct categories: the physical layout and the format of the question responses. The physical layout of the questions should be clear, neat and easy to follow (Neuman, 2011). Questionnaires should have clear instructions for the respondent, individual questions should be numbered and the length of

individual questions should be kept to a minimum whilst maintaining their effectiveness. The response rates for self-administered questionnaires are also improved if the layout allows for the questions to be well spaced and to aid presentation as there is no supportive interviewer to interact with the respondent (Neuman, 2011). With regards to the format of the questions, Neuman (2011, p. 295) suggests that 'boxes to be checked and numbers to be circled are usually clearest', and that a matrix question is a compact way to present a series of questions using the same response categories. These guidelines have been adhered to in the design of the questionnaire in this research.

According to Neuman (2011), there are three fundamental issues which must be considered with regards to question order; the organisation of the overall questionnaire, question order effects and context effects. The organisation of the overall questionnaire should have a clear beginning, middle and end; the beginning benefits from 'pleasant, interesting and easy questions' (Neuman, 2011, p. 293) which draw the respondent in. The middle may contain more in depth, searching questions which should be carefully ordered to place common questions together in order to avoid moving between topics excessively as the questionnaire will have a higher response rate if it flows smoothly and is logically organised. Finally, Neuman (2011) recommends ending with non-threatening questions such as (sensitively worded) demographic questions. Question order has also been found to impact on the answers provided by respondents, for example, Schuman and Presser (1981) asked a sample of United States (US) citizens whether communist news organisations should be allowed to enter the US and send reports home without censorship. They then asked the sample whether American news organisations should be allowed into communist countries and to send uncensored reports back. When the question order was reversed and the American news organisation was the focus first, censorship of both news organisations was far less agreeable than when the communist organisation was the focus first. Clearly, the impact on the reliability of the results means that question order must be critically analysed before the questionnaire is finalised and distributed.

Previous research (e.g. Smith, 1987; Peterson, 1984) has demonstrated the importance of carefully considering the exact wording of the questions used in the research instrument. Questions should apply simple vocabulary and grammar to minimise confusion and the presumptions of well-educated researchers should be reviewed and analysed before being automatically adopted in the design of the questionnaire (Neuman, 2011). This is even more pertinent for self-administered questionnaires

where there is no interviewer to clarify potential confusion associated with the wording of questions. Smith (1987), for example, found varying responses to a question which asked US citizens about 'spending to help the poor' and 'spending on welfare'; while the two may be synonymous, the number of positive responses to spending on welfare was below those to helping the poor. Another piece of research, cited by Neuman (2011) asked respondents whether they considered TV news to be 'impartial' and it became apparent to the researchers that less than half the respondents understood the word impartial. The questions employed in the questionnaire should not be double-barrelled but individual, and those individual questions should be screened for any bias which may result from positive or negative wording or leading questions (Sekaran 2003).

3.3.3.1 Questions to Address the Composite Choice Set Model

It was logical as well as beneficial to the flow to elicit information about vacation choice alternatives involved in the decision making process prior to identifying which information sources were used when researching said alternatives. In accordance with the literature on questionnaire design, it was decided that the enquiry into the composition of the choice set model be identified in reverse, i.e. that final destination choice is established first, followed by the destinations considered in the late consideration set and finally the destinations which complete the early consideration set. Reversing the choice set model in this way creates a question order which increases in difficulty and begins with 'pleasant, interesting and easy questions' as recommended by Neuman (2011, p. 293). Question 1 identifies the destination that the respondent ultimately chose and Questions 9 and 13 are intended to identify the late and early consideration sets respectively. Between these questions, it is expected that statistical data should be created in relation to the size of the consideration sets and this data can be compared to previous research conducted by Bronner and de Hoog, (1985) and Woodside and Sherrell, (1977) to establish whether consideration set composition has changed over time.

The response field has been considered and it has been decided that although research suggests that the late consideration set consists of up to six (4 (± 2)) destinations (Bronner and de Hoog, 1985; Woodside and Sherrell, 1977; Perdue and Meng, 2006), respondents will be able to identify up to 8 alternatives for which they actively searched for information. Pilot testing confirmed that this was sufficient. The early consideration set will include up to an additional 8 destinations which were

considered but not included in the information search stage, bringing the total number of choice alternatives considered to 16. According to research by Woodside *et al* (2004) and Um (1987), a capacity of up to 16 alternatives is more than enough and the pilot study once again supported this decision as none of the respondents required additional 'space' to enter more choice alternatives. List-style questions are the most appropriate format for questions 9 and 13 given that the intention is to identify the number of alternatives considered in each set; the actual destinations that are identified are not of primary importance.

After much consideration it was decided not to include a question which attempted to identify the awareness set for two reasons; firstly, it is already understood by authors such as Narayana and Markin, (1975), Um and Crompton, (1990), Crompton, (1992) and Decrop (2010) to be extremely large, consisting of all of the destinations that they may consider travelling to before any inhibitors are introduced. The second reason for not asking respondents to identify all of the destinations that they are aware of (or alternatively to identify the *number* of destinations that they are aware of) was the negative impact that such a question would have on the operational functionality of the questionnaire. It would be time consuming for the respondents to answer this question and it is unclear as to whether they would be able to state the full list of destinations that they are aware of. This is supported by Crompton (1992, p. 423)) who stated that 'operationalising the awareness set the context of tourism research is challenging'. The appraisal of the costs and benefits of this question led to its elimination from the questionnaire. The questions discussed above are intended to identify the number of alternatives that populate the stages of decision making (and the stages of the composite decision making model). Further questions have been included to identify the composition of individual choice sets within each stage of decision making and to identify the dynamics of choice alternatives within the overall process. Having identified the alternatives that comprise the early consideration stage (question 13), question 15 is designed to identify the reasons for some alternatives not being carried forward to the late consideration stage. As identified in the literature (Crompton, 1992), some alternatives are discontinued in the process because they are either undesirable or less desirable than other alternatives that populate the early consideration stage. Part of question 15 asks whether destinations were discontinued because the respondent knew more good things about other places. The destinations to which this applies will form the surrogate set; they are not excluded permanently but are not currently good enough for further consideration due to the presence of preferred alternatives. Question 15 gives three more reasons for discontinuation of alternatives that respondents may select and these have also been informed

by the literature (Crompton, 1990; Decrop, 2010). They are: because some aspect puts them off, because it is unrealistic or because they lack sufficient information to motivate active information search. The answer provided by the respondent will identify whether alternatives will populate the unavailable set (perceived to be not realistically possible), or the inept set (perceived to be not good enough for consideration). The alternatives are seen to be collectively exhaustive reasons for discontinuation of choice alternatives, and this is supported by the research of Decrop (2010).

Alternatives not discontinued in the early consideration stage will move to the late consideration stage, in which, some will be subject to active information search and some will not (Crompton, 1992). Although Crompton does not provide an explanation regarding the rationale for an inaction set in the late consideration stage in his 1992 paper, it is the case that some vacations do not require research. Owners of holiday cottages accessible by means of their own car, for example, do not need to research price, availability, accommodation or transport information; they can simply decide when to go. The majority of vacation decisions, however, are likely to involve the requirement for active information search, and question 11 presents respondents with a list of information sources that they may have accessed during the information search stage of the decision making process. The nine sources presented as options were decided upon based on a review of the information sources that other authors presented as alternatives in their research.

Question 4 (Did you need to find any information before you travelled?) has been included to identify the alternatives that would comprise the 'inaction set'. The late consideration stage contains an original path (i.e. one that does not exist on the Crompton (1992) or Decrop (2010) Choice Set models that informed the composite model) between the action set and choice which will be tested. The secondary awareness set is included for alternatives that may not have been included in the decision making process up until the point of active information search, an activity which may create an awareness of an additional destination. Whether this original path in the Choice Set Model is required will be established in this research. Question 12 asks respondents to identify why they did not chose the alternatives that did not become the final destination of choice, and the response options are similar to those in question 15. Information search may, for example, establish that an alternative is not realistically possible (e.g. because of price or availability), is not of an acceptable standard (e.g. flight duration or the quality of available accommodation) or that the alternative was

realistically possible and acceptable, but another alternative is more preferable. Again, these alternatives are designed to be collectively exhaustive.

The final choice set remaining to be explained is the final destination choice itself. Question 7 relates to the main reasons for choosing a specific destination and has been informed by the literature on destination choice. Recommendations from friends and relatives, previous visitation, subjective utility and value are considered to be strong influences (Wöber, 2002; Xie *et al*, 2006), the feasibility of visiting the destination is another influence (Decrop, 2010) and so is the quality and trustworthiness of the information available for the choice alternatives (Dawar, Parker and Price, 1996). Question 7 applies an agreement scale in the form of 5-point Likert scale to ascertain to what extent the above did influence destination choice. The results of this question should provide an explanation as to why one destination in the late consideration set is chosen and the others are rejected.

A series of additional questions have been included in the questionnaire to help filter out respondents who have not been through the extended decision making process due to specific travel requirements. Question 2 will identify the purpose of the trip, as education, business or travellers who are visiting friends or relatives are likely to have little or no choice over the destination, thus curtailing the decision making process. Question 6 enquires about the duration of the trip because research has identified that longer trips are more likely to involve extended decision making processes due to the higher risk and larger investment of time and money required.

3.3.3.2 Questions to Address Information Sources

The two main concerns relating to the information sources used during the decision making process are firstly, which ones are involved at each stage (and the magnitude of the involvement), and secondly, decision makers' perceptions of the information sources (which can be assessed for their explicative ability). Questions 8, 11 and 14 have been designed to identify the information sources that have played a role at each stage of the decision making process. Question 8, which asks respondents to state through which source they made their booking, has been placed within the section relating to final choice. Question 11 asks respondents to identify which information sources they accessed to research the alternatives in the late consideration stage; the information sources

presented in the list were identified based on a review of the literature. Question 14 relates to choice alternatives that form the early consideration stage. As this stage does not yet involve active information search (Crompton, 1990), the information sources included must be passive and therefore include broadcast media, printed media and friends and relatives. Respondents are asked to state whether they recall information on the destinations in the early consideration stage being transmitted to them through these sources. This is likely to be the most challenging question included and the data elicited from this question must be analysed with an understanding that respondents may not provide perfectly accurate answers. That is to say, they may not recall having seen a TV advert for a destination that they considered; research has suggested that the actual message delivery through such passive information sources may not be remembered in the short term, but the images created may endure in the long term memory. The value of this question is in its potential to identify a significant number of responses pertaining to particular sources, information which may be useful for making recommendations to destination marketing practitioners.

Questions 16, 17, 18, 19 and 20 enquire about the respondent's perceptions of the information sources. The information sources included in the questions only refer to those which may be actively engaged with by the decision maker, as these are the sources where consumers make choices about accessing or not. Respondents are asked to state their level of agreement with statements made about critical aspects of information sources using a 5-point Likert scale. The five point scale has the advantage of being simpler for the respondent to use due to the relatively low number of alternatives compared to a seven or ten point scale, but research (e.g. Dawes, 2008) has found that there is very little difference in the statistical outcomes in terms of means, skewness or kurtoses between the three scales. Questions 16 and 17 use this response format to identify the extent to which they consider the information sources unbiased and up to date, respectively. These issues are related, but not identical as there may be other trust issues with certain information sources. The accessibility of information has also become an increasingly relevant issue, in part, due to the advancement of broadband internet connections at home; therefore, question 18 enquires about the perceived ease of access of the various information sources. It may be found that the perceptions of the ease of accessibility may be correlated with the engagement with these information sources.

Question 19, which enquires about the level of influence, does relate to questions 16 and 17 as trust and the perceived accuracy of information should correlate with the level of influence of each source, however, a direct question is important when researching the role of information sources. The final enquiry regards the perceived value which may be found from each information source and only lists the sources that facilitate bookings. Understanding which information source is seen to provide the best value is also of critical import to destination marketing practitioners, and analysis will be conducted on the relationship between the results of this question and the results of question 8 which asks through which sources vacation elements were booked.

Question 21 is designed to identify the concerns that may be of primary importance to the decisions maker. The question asks respondents to rate their level of concern on the three types of risk that are mainly associated with vacation purchases: financial risk, performance risk and physical risk. By using a 5-point Likert scale, the respondents will provide responses which can be compared with each other, as well as an indication of the levels of acceptable risk for each.

Finally, demographic information will be elicited in the questionnaire in order to test the relationships between information source usage and age, gender, level of education and household income. Research has demonstrated that there are relationships between these variables and the information source engaged with, and these tests will add to the research agenda which focuses on this.

3.4 Sampling Design

The overall population for this research is considered to be any person who undertakes a decision making process for the purpose of holiday destination choice. This is clearly a very broad population which includes many diverse variables. Finn *et al* (2000) explain that it is not feasible or effective to include all members of the survey population in the data collection process, therefore a sample of that population is required. Overcoming feasibility issues are not the only benefits of sampling. Cooper and Schindler (2003) identify that studying a sample of the population is less expensive than conducting a census (a study of all individual units or elements within the population) and takes less time. They also argue that conducting research amongst a sample provides 'greater accuracy of

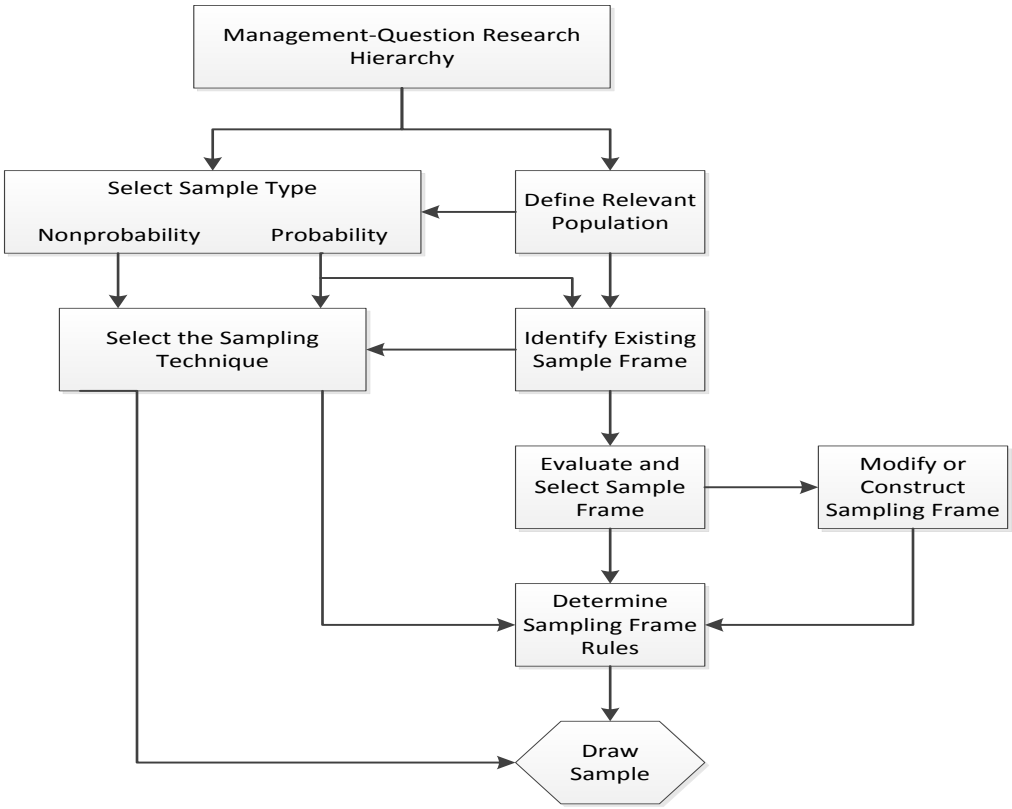
results' (Cooper and Schindler, 2003, p. 179), and the explanation given for this apparent anomaly refers to amount of time saved which may be used for more thorough investigation and analysis of missing or suspicious results. Given the size of the population involved in this research, the argument for sampling is unassailable.

The results drawn from the sample should be representative of the overall population; therefore, careful consideration was given to the sampling design to ensure that it is accurate and precise. Accuracy relates to the absence of bias within the sample (Cooper and Schindler, 2003). It is acknowledged that when researching humanistic values, some elements of the sample may over represent values whereas some may under represent these values. The sample must therefore include sufficient elements for these variances to balance each other out. The sample must also be analysed for systematic variance, i.e. 'the variation in measures due to some known or unknown influences that 'cause' the scores to lean in one direction more than another' (Kerlinger, 1986, p. 72). The literature review uncovered demographic influences on the choice of information source used in the decision making process (age, gender, levels of education and income), and the sample used in this research was analysed to ensure that it was not over represented by any demographic (see results chapter for overview of demographics).

Just as systematic variance must be considered and assessed, the matter of precision must also be recognised. According to Cooper and Schindler, (2003, p. 181), 'differences in the numerical descriptors that describe samples may be expected to differ from those that describe populations because of random fluctuations inherent in the sampling process'. These differences, or sampling errors, as they are known, occur after systematic variance has been eliminated and are a result of pure selection chance, which, while it may be minimised, cannot be eliminated entirely and must be accepted as a consequence of sampling. The concept of precision will be discussed further in section 3.6.5.

Figure 8 illustrates the sample design process according to Cooper and Schindler (2003). Initially, there are two types of sample; probability and non-probability.

Figure 8; Cooper and Schindler's (2003) Sample Design Process



Source: Cooper and Schindler (2003)

3.4.1 Probability and Non-Probability Sampling

In probability sampling, each element on the complete and correct list of the survey population (known as the sampling frame) has an equal chance of being included in the sample. Probability sampling is likely to be free of bias (Finn *et al*, 2000) and also has the benefit of allowing for a measurement of the precision to be made based on a given confidence level. Probability sampling can be simple (all elements in the sample frame have an equal chance of selection), systematic (every *n*th element will be selected from the sample frame), stratified (where the sample frame contains sub groups and elements are drawn randomly from each subgroup) or cluster (where elements are divided into groups and groups are chosen randomly for the sample). Cluster sampling is particularly useful where face to face contact is required and the sample frame is large and geographically dispersed, e.g. British holiday-makers (Finn *et al*, 2003) and this method was considered for the research, but rejected due the absence of an established sampling frame.

According to Finn *et al* (2003), an accurate sampling frame is required for probability sampling and if a sampling frame does not exist, non-probability sampling is required. Given that the population relevant to this research comprises holiday decision makers, an accurate and complete sampling frame is impossible to establish.

It is acknowledged here that non-probability sampling may be criticised; probability sampling is seen to be 'more reliable and representative' of the overall population (Finn *et al*, 2000, p. 116). Cavana *et al* (2001, p. 262) state that when non-probability sampling is used, 'the findings from the study of the sample cannot be confidently generalised to the population'. However, authors also agree that non-probability sampling is appropriate when no sample frame is available and that the problems associated with non-probability sampling may be overcome through diligence and the adoption of certain methodological procedures. When considering the population that is relevant to this research (holiday decision makers), it is clear that establishing a sampling frame from which to randomly select elements is unfeasible and non-probability sampling is the practical option.

The fundamental issue when it comes to sampling is that the sample contains an appropriate range and number of respondents that will ensure that the results are representative of the overall phenomenon. A thorough literature review which identifies the significant situational and demographic variables which influence the behaviour of individuals can guide the researcher towards an effective non-probability based sample. The researcher is aware that an accurate and complete sampling frame is not available and through a comprehensive literature review and protocol analysis, has taken great care to ensure that the influences on the decision making process as well as the influences on the choice of information source will be comprehensively included in both the sample and the data collection instrument. Given that this is the case, probability sampling would provide less benefits over non-probability sampling than would otherwise be the case and given the additional procedural requirements of applying probability sampling to this specific research, it may be argued that non-probability sampling will allow more accurate investigation and analysis of missing or suspicious results as more time may be devoted to the results analysis stage in place of data collection.

There are many types of non-probability sampling which authors (e.g. Cooper and Schindler, 2003) categorise into either convenience or purposive sampling. With convenience sampling, researchers

simply conduct their research amongst the most easily accessible respondents. There is little or no consideration given to the variables which may induce bias and hinder research validity. With purposive sampling, populations which conform to certain criteria are selected after due consideration. Purposive sampling has been further divided into quota and judgement sampling. If quota sampling were to be used for this research, the researcher would be required to identify the major variables which influence the selection of information sources used during the vacation decision making process. As has been discussed previously, these include age, gender and level of education. The researcher would then have to create groupings within each variable (e.g. 18 – 25 years old), identify the proportion of that grouping within the overall population and collect an equal proportion of responses within the data collection phase. This implies an accurate knowledge of the overall population, or a sample frame.

Purposive judgement sampling occurs when a researcher selects a group based on specific selection criteria. The characteristics that comprise the selection criteria in judgement sampling are often extremely exclusive, however, with regard to this research, the criterion which is of primary importance is whether respondents may be described as holiday decision makers or not; those that may are the sample frame and a sample population should be drawn from that group. When considering the characteristics of people who take (and make decisions about) holidays, two prerequisites are that they will have sufficient time and disposable income to take a holiday. Finding and selecting a large group of people for whom that may be the case requires judgement on the part of the researcher. The sample population selected for this research will be academic and support staff, students and technicians of a UK University with a population of over 25,000. It is argued that such a large group of diverse individuals can be expected to contain firstly, sufficient number of holiday decision makers, and secondly, a demographically diverse sample population from which data may be analysed for relationships between demographics and variances in behaviour.

The literature review conducted within this research identified the variables that are most influential on choice of information source (age, gender, nationality/culture, level of education and household income), and the sample selected for this research has the diversity to include responses from all groupings within each variable. This type of judgement sampling which is designed to include diversity in the characteristics of the sample population has also been called heterogeneous

sampling and relationships between demographic variables and behaviour which emerge may represent opportunities for further research in which a sample frame may be available.

The decision to use the diverse populations found in Universities from which to extract a sample population is also supported by numerous researchers studying decision making behaviour and tourism information sources (e.g. Beatty *et al*, 1988; Oliver and DeSarbo, 1988; Um and Crompton, 1990; Häubl and Trifts, 2000; Lepp and Gibson, 2003; MacKay and Smith, 2006; Pan and Fessenmaier, 2006; Kim *et al*, 2007; Simpson and Siguaw, 2008; Chen *et al*, 2009; Xu, 2010; Jun and Holland, 2011).

3.4.2 Sample Size

According to Saunders *et al* (2007, p. 283), 'for all non-probability sampling techniques, other than quota samples, the issue of sampling is ambiguous and, unlike probability sampling, there are no rules'. Many authors on research methods (e.g. Cooper and Schindler, 2003; Sekeran, 2003; Saunders *et al*, 2012) however, do present guidelines which should be considered when determining the sample size of non-probability research. Finn *et al* (2000) also state that the size of the sample will be based on the outcome of pragmatic decisions regarding the nature and purpose of the research; if descriptive information is required, relatively smaller samples are required, whereas where research intends to explain behaviour or attitudes, larger sample sizes are required. As the research instrument used in this study has been designed to identify the decision making process (descriptive information) as well as the decision makers' perceptions and use of information sources (explanatory information), a relatively large sample size is required.

When discussing the sample size, it is important to include a discussion of precision and confidence. In relation to statistics, precision is described as how close the estimate comes to the true population characteristic (Cavana *et al* 2001). By analysing the data obtained through research, one may identify that out of every ten holiday decision makers, between 5 and 9 (inclusive) will use independent traveller review sites to inform their decision. If one wanted to be more precise about an estimate, one may say that between 6 and 8 (inclusive) holiday decision makers use independent traveller review sites. The closer one comes to the true mean for the population, the greater the precision. Precision has been described as a function of the range of variability of the sampling

distribution (Cavana *et al* 2001), which itself may be described as the distribution of means taken from samples of the population around the population mean. The smaller the dispersion of the sample mean around the population mean, the greater the probability that the sample mean is representative of the overall population mean. This variability is called the sample error and can be calculated from one sample based on the following formula:

$$s_{\bar{X}} = \frac{s}{\sqrt{N}}$$

where S is the Standard Deviation of the sample and *n* is the sample size. Sekeran (2003,) continues to explain that the standard error varies inversely with the sample size, meaning that a larger sample size results in a smaller standard error and a greater precision of our estimate.

Precision, however, is a trade off with confidence which relates to the level of certainty we have that our estimate represents the population mean. The narrower the range within our estimate, the less confidence we may have that that estimate is accurate. For example, we may say that the number of holiday decision makers using independent traveller review sites in between 5 and 9 with a 95% confidence, but with only a 90% confidence when saying the number lies between 6 and 8. This can be represented by the following formula:

$$\mu = X \pm KS_x$$

where μ is the population mean, X is the sample mean, K is the critical values for *t*[16] (discussed in more detail later) and S_x is the sample error which was discussed above.

Sekeran (2003) uses the following example to illustrate the formula; 64 shoppers were found to have a mean spend of $105 and a standard deviation of $10. The standard error ($S_x$ = 10 / √64) is 1.25.

[16] For a 90% confidence level, this value is 1.645, for a 95% confidence level, this value is 1.96 and for a 99% confidence level, this value is 2.576.

Given that the *t* value for a 90% confidence level is 1.645, we can say that the mean spend for the population is $105 ± $2.056 (1.25 x 1.645) with a 90% confidence level. If we require a higher level of confidence we must reduce the level of precision. For example, the *t* value for a 99% confidence level is 2.567, therefore if we want to assert this level of confidence, the range of values within which we expect the population mean to fall increases to $105 ± $3.22 (Sekaran 2003, p. 288). It can be seen from this example that increasing the sample size has beneficial results on the study. Authors such as Cavana *et al* (2001) also suggest that too large a sample may result in 'Type II' errors, i.e. where weak relationships may reach significance levels due to a large sample size. According to Sarantakos (1998), a large sample size does not guarantee a higher degree of validity and precision, rather that it is the quality of the sample that is more important when using non probability sampling of a heterogeneous population.

The sample size for a study should therefore take into consideration the level of confidence in the sample and the sampling error, which, in a group of 100 elements of the population, is 5% (Babbie, 2010); this is considered as a standard error in probability theory. To reduce the standard error to plus or minus 2.5%, therefore, 5% in total, a sample should be at least 400. Tull and Hawkins (1993) suggest an alternative method to calculate a sample for an 'unknown' population according to the following parameters: allowed error (e^2), level of confidence to be obtained (Z^2), and an estimated variance for the population (σ^2) using the formula:

$$n = \frac{Z^2 \sigma^2}{e^2}$$

According to Field (2009) the coefficient Z, for a 95% level of confidence, is 1.96 and, according to Tull and Hawkins (1993), the variance σ^2, for a 5 point Likert scale, is 1.8. This research is based on five-point Likert scales and consequently, a 5% (100% - 95% confidence) allowable error *e* is 5% of 5 i.e. 0.25. Therefore, the calculation of the sample for this research is as follows:

$$n = \frac{1.96^2 1.8}{0.25^2} = 115$$

However, the level of confidence in the accuracy of the sample increases with the expanding size of the confidence intervals. Therefore, by increasing the sample size, the level of accuracy of the sample increases (Veal, 2011). Moreover, Lewin (2011) argues that when subgroups are considered,

these should be at least 100. The sample size for this research was 590 people and the details can be found in section 4.1.2.

3.5 Validity and Reliability

The research methods adopted within this study have been considered carefully in order to ensure its credibility in terms of the validity and reliability of the findings.

3.5.1 Validity

Validity is the extent to which the test measures what we intend for it to measure (Cooper and Schindler, 2003) and can be described as internal or external. External validity refers to the ability of the research findings to be generalised across other people, events or settings (Sekeran, 2003) and this can be encouraged through careful selection of the sample (it must be remembered, however, that as these are generalisations, they may never hold true of every individual within the population). Internal validity is the 'extent to which the differences that were found with a measuring tool reflect the true differences among respondents being tested' (Cooper and Schindler, 2003, p. 231). The difficulty here is that the researcher rarely knows what the true differences are, in which case, relevant evidence must be found to support the validity of the research. This evidence may be in the form of content, construct and criterion based validity.

Content validity refers to the completeness of coverage of questions for a research topic and can be aided by a thorough review of literature currently available on the subject (Saunders *et al*, 2003). The questionnaire used in this research has been informed by a comprehensive review of the literature on both decision making theory and the nature of contemporary information sources. A secondary check for content validity was performed through numerous discussions with the supervisor of this particular research.

Construct validity is an evaluation of the measurement in relation to theoretical frameworks (De Vaus, 2002) and is normally concerned with the relationships among the variables of a scale (Babbie, 2010). These relationships should express the way in which the measure being validated is supposed to behave (De Vellis, 2012). Drust (2011) describes construct validity as how well a theoretical concept, such as the perceived utility of an information source, has been transformed into a

functional and operating reality. According to Churchill (1979), researchers must analyse the constructs used in their work for discriminant and convergent validity. Discriminant validity is 'the principle that measures of theoretically different constructs should not correlate highly with each other' (Trochim, 2006, p. 145). If the items used to measure two theoretically distinct constructs are highly correlated, then those items may be measuring more than they were designed to and therefore cannot be used to validate the construct. Convergent validity refers to the extent to which the items used to measure a construct (in this case the four key characteristics of the information sources) have a high correlation, i.e. if the items actually do measure the construct they should be highly correlated (Trochim, 2006). What the r value (which shows the strength of the correlation) should be is not agreed in social research. Authors such as Cohen (1988) argue that an r value of .1 to .29 represents a weak correlation, .3 to .49 represents a moderate correlation and .5 and above represents a strong correlation. For this research, and in accordance with Trochim's (2006) proposed methodology to test the validity of the construct, correlation analysis was conducted between the individual items used to measure utility and the individual items used to measure a second construct for which data were collected during this research - risk acceptability. Correlation matrices were created for each information source testing the key characteristics against the three items used to measure risk acceptability (acceptance of performance risk, physical risk and financial risk); the correlations were then analysed for convergent and discriminant validity. The results for all nine information sources are presented in the results chapter.

Criterion based validity 'reflects the success of measures used for prediction or estimation' (Cooper and Schindler, 2003, p. 233). Predictive validity is achieved when the measures used generate results which can be used to accurately predict future behaviour; concurrent validity is achieved when individuals are accurately categorised at the point of measurement. The difference between predictive and concurrent validity is merely the time frame (Cooper and Schindler, 2003). While it may be simple to ensure concurrent validity of many demographic variables such as age and level of education, predictions which are based on these variables (either individually or collectively) may be more problematic. The criteria which measure the influences on behaviour must be assessed for validity. In relation to the choice of information source element of this research, the level of trust associated with the source, the accuracy of information included within the source, the accessibility of the source and the value that can be obtained from the source have all been identified as criteria which are influential to behaviour. To ensure predictive validity, these criteria should be relevant, free from bias, available and reliable. These criteria were established from a review of related

research findings discussed in the literature review[17]; they are relevant, free from bias, available and reliable (reliable to the extent that the nature of information sources is relatively stable over time).

The three types of internal validity are all interrelated. This research intends to test the descriptive accuracy of the composite choice set model including identifying variables such as the number of destinations that comprise the choice sets. This will be achieved through the data collection and data analysis stage of the projetc. If this is established, the number of destinations which are included in the action set, for example, may be predictable giving destination managers an understanding of the number of destinations that they must consider as being the most direct threats. To achieve this, content, construct and criterion based validity have been addressed through a comprehensive review of contemporary and relevant literature (to address content and criterion based validity), correlation analysis (to address construct validity).

3.5.2 Reliability

Reliability refers to the consistency of results that are obtained from a measuring instrument such as a questionnaire. Saunders *et al* (2012, p. 192) identified four threats to reliability:

1. Participant error; factors which adversely affect the way in which the participant responds (e.g. when they are in a rush).
2. Participant bias; where false responses are given potentially due to pre-existing involvement or because their responses can be overheard.
3. Researcher error; where the researcher's interpretation is inaccurate due to, for example tiredness or a lack of understanding of the concepts involved.
4. Researcher bias; any factor which induces bias on the part of the researcher.

The questionnaire used in this research will be self-administered and made available through an online source. This will aid in the elimination of participation bias as there will be no interaction between the researcher and participant therefore the likelihood of respondents answering in ways that are deemed more socially acceptable may be reduced. This will also help to reduce researcher error as there will be no subjective interpretation of responses which may occur when gathering responses in person. Participant error has been reduced as much as possible through vigorous pilot

[17] See Money and Crotts (2003) for a discussion of trust and commercial information sources; Buhalis and Law (2008) for accuracy, accessibility and value for money.

testing of the research instrument to ensure that it is clear in language and layout. Additionally, to reduce the likelihood of loss of interest and fatigue (which may also cause participant error), the questionnaire was designed to take only ten minutes to complete and also allows the respondent to take a break from the questionnaire and return to it later. Researcher bias has also been addressed and through pilot testing as well as by referring to related previous studies for guidance on questionnaire and question design.

Pilot testing, anonymity for the respondents and a careful consideration of the questionnaire design and distribution strategy are all important to reduce or eliminate reliability errors which originate from the participant. Meticulous planning, a review of pertinent literature, an awareness of the threat posed by bias and a preliminary pre-test of the research instrument are important to reduce or eliminate reliability errors originating from the researcher. Reliability was also encouraged through the inclusion of carefully balanced agreement scales which also included an alternative of neither agree or disagree. Agreement scales are a common feature in social studies (De Vellis, 2012) as they can test not only whether respondents agree or disagree with a statement, but can also test the extent of the agreement, thus providing additional information which may add value to the results. Agreement scales such as the Likert scale must be carefully worded to create seemingly equal distances between alternatives, e.g. 'strongly agree', 'agree', 'neither agree or disagree', 'disagree' and strongly disagree'.

Sekeran (2003) discusses two areas of concern for reliability: stability and consistency. Stability refers to the degree to which a process is unchanging over time and a common example of how it is established is by the same researcher re-administering the same questionnaire to the same respondent. The results should be almost identical for them to be reliable as any significant differences in the responses obtained from the two surveys will represent flaws in the data collection process. The questionnaire used in this research went through the process of test-retest whereby it was distributed to the same respondents twice (after a period of one month) to test for any significant changes in responses. According to Cooper and Schindler (2003, p. 238) the 'procedure is stable if it gives the same reading on a particular person when repeated one or more times'. The retest stage was administered as part of the pilot test of the online version of the questionnaire, and no significant changes in responses were provided.

3.5.3 Pretesting the Questionnaire

Pretesting the research instrument is critical and may be considered to consist of a number of stages, the first used in this research involved the use of an expert (the research supervisor) who scrutinised the instrument for its appropriateness and to comment on its suitability for the required purpose. Following this, protocol analysis was conducted in which the questionnaire was given to six individuals who were representative of the sample who went through the questionnaire and 'thought out loud' in order to uncover areas of misunderstanding or confusion. Finally, the pilot test was conducted. These processes are discussed in further detail below.

The questionnaire used in this research was critically analysed by the supervisor of the research and a number of revisions were made to the initial draft (see Appendix 3 for first draft). Question 1 on the first draft which attempts to identify the size of the awareness set was eliminated for the reasons discussed above; the value of the information was minimal and the drawbacks significant. The trip duration options were changed from three possible answers to four to allow for more detail to be collected; the rationale for this was that trip duration is strongly correlated with the levels of risk associated with holiday purchases and adding more options allowed for richer analysis whilst only requiring minimal additional effort from the respondents. Specific examples of booking alternatives were included in question 9 to avoid confusion as the researcher is aware that the terminology may not be perfectly understood by the respondent and this may have a negative impact on the reliability of the questionnaire. Where question 9 is designed to identify the Action Set, the number of possible destinations identified by the respondent was increased from five to seven. Although research has suggested that this set comprises of up to six alternatives, it was decided that respondents should not be limited to six and that by allowing for more alternatives to be identified, it may be possible to draw conclusions about the size of the Action Set in the contemporary information environment.

An additional question (question 10 on the final draft, Appendix 2) was included after this preliminary pilot test as discussions between the researcher and research supervisor raised the question of whether destinations which were previously unconsidered may emerge during the active information search stage. This question was included to identify this possibility as the composite choice set model is intended to be exhaustive of all possible decision making process flows.

Friends and relatives was added to question 11 and 16 as it was concluded that they may be both passive and active information sources and therefore must be added to the other active sources as response alternatives. A minor rewording of question 14 was made ('please tick all that apply' to 'please tick any that apply') to avoid confusion over how to respond if no alternatives apply. Question 15 included more examples to encourage clarity of responses which will be translated to create the inept, unavailable and surrogate sets. Questions 16, 17 and 18 were reworded to create a more uniform style in order to intensify the focus on the actual variations within the questions. Question 20 on the final draft was included as it was agreed that decision makers may engage with the information sources included in the questionnaire because of the perceived value for money they offer. The final change made after the preliminary pilot test was to identify the travel party that the respondent was a part of. This has been shown to influence the decision making process as family groups with children, for example, spend more time researching destinations to reduce both risk and uncertainty.

3.5.4 Protocol Analysis

Once the questionnaire had been through the initial stage of the pre-test, eight individuals who would otherwise have been included in the sample, were shown the online version of the questionnaire in order to conduct protocol analysis. This involved the respondents going through the questionnaire in the presence of the researcher and essentially, voicing their thought processes when moving through the questionnaire. Protocol analysis, while time consuming, is a meticulous method of analysing a questionnaire's reliability as it provides the researcher with detailed understanding of how respondents perceive and interpret the questionnaire (Smagorinsky, 1989). Hussey and Hussey (1997) recommend a sample of less than a dozen for the protocol analysis and eight people were used in this research projetc. The respondents represented a range of demographics relevant to this research (gender, age, levels of education and income). This process resulted in a number of changes to the questionnaire.

Two of the eight respondents raised an issue with question one (identifying the resort or city they are travelling to) as they were undertaking multi-stop holidays. This required the question to be edited to ask respondents to answer the questions based on one particular stop if this applied to

them. Question four was re-worded to 'did you require any information before you travelled' from 'did you require any information before you booked' as the word 'booked' implies a requirement for information and this question was intended to identify travellers who do not need to engage with any information sources. Question five was reworded to avoid a slightly awkward 'how long is/was the holiday'; it now simply asks respondents to state the duration of the holiday. A new option was added to question seven; 'there were several similar places, but this looked the best overall'. Question nine was changed to allow respondents who did not look at alternatives to move directly to the next relevant questions (i.e. question 13). Question nine was also reworded to remove 'actively look through' and replace it with 'look for' and 'research' as this was deemed to be a clearer question which maintained the emphasis on active information search. One responded argued that the phrase 'did you find out about' in question ten implies active and purposeful information search about a specific resort or city but the question was intended to identify whether respondents were guided towards a previously unconsidered alternative while they were researching destinations on their short list. The question was altered accordingly. Question 12 was edited to include having been before for the reason for rejecting an alternative as this may render an alternative 'inept'. When it came to question 14, the internet was another information source identified for creating awareness of destinations and while this is a valid suggestion, the researcher had to be careful to ensure that only passive information types were included on this list of options. To this end, the term 'online advert' was used and included as an example in the 'digital media' option. Questions 16 and 17 (trustworthiness and accuracy of information sources) were found to be too similar a concept by five out of eight of the respondents. The intention of question 16 was to explore the relative levels of trust attributed to the commercial and the non-commercial sources of information available to the decision maker, while the intention of question 17 was to identify how accurate the information was deemed to be in terms of it being up to date. An independent guide book may be trustworthy in that it is unbiased, but if it is several years old, the information may not be relevant. The questions were reworded to 'unbiased' and 'up to date' accordingly. Finally, the researcher was asked as to why the full list of information sources was not included in the question enquiring about 'value' (question 20). The rationale for this reduced list is that it is designed to only contain information sources with booking facilities, therefore sources such as travel guide books were not included. There were no issues uncovered regarding the web based nature of the questionnaire; respondents understood how to move through and answer each question without incident. These respondents were not included in the final sample and their responses were discarded in order to avoid reliability problems.

3.5.4 Pilot Test

After the protocol analysis had been conducted, the questionnaire went through the pilot test process. Pilot testing the questionnaire is considered an indispensable stage of the research design process. According to Cooper and Schindler (2003), the data collection phase of research begins with a pilot test; the purpose being to 'detect weaknesses in design and instrumentation' (Cooper and Schindler, 2003, p. 86). Saunders *et al* (2010) also state that the pilot test should test the recording of the data and emphasise the importance of this for questionnaires distributed via a web site. In order to conduct the pilot test, the link to the online questionnaire was distributed to a small sample (15 people) of the target population who completed the questionnaire separately from the researcher. The results of the questionnaire were assessed for anomalies and the respondents were interviewed to identify any ambiguity associated with the completion of the questionnaire. The pilot test did not identify any significant problems.

3.5.5 Questionnaire Distribution and Collection

According to Anseel (2010), researchers employing questionnaires must carefully consider the distribution and collection methods in order to avoid the significant threat of non-completion. This is especially true of self-administered questionnaires where participants are 'invited' to complete the questionnaire rather than it being 'administered' face to face. (Saunders *et al*, 2012). External validity relies on a sufficient number of responses being collected to ensure the generalisability of results and therefore the contribution of the research. A number of factors can influence the response rate and studies conducted by Edwards *et al* (2002) and Anseel *et al* (2010) summarise the key methods for ensuring high response rates as;

1. Providing advanced notice
2. Following up unanswered requests
3. Monetary Incentives
4. Topic salience
5. Personalisation (e.g. in covering letters)
6. Anonymity of respondents
7. University Sponsorship
8. Distribution by hand (as opposed to post)
9. Use of the internet

The data collection for this research provided a monetary incentive in the form of a prize draw, use of the internet to distribute the questionnaire and the opportunity for anonymity – respondents did not need to provide personal details.

According to Saunders *et al* (2010), researchers must be aware of certain operating guidelines when using the Internet as the questionnaire distribution channel. If the questionnaire is distributed via email, they advise ensuring that the content is relevant to the respondent, contacting a maximum of 20 people at any one time, avoiding using multiple mailing lists to ensure no one person receives the questionnaire more than once and avoiding using attachments as they may contain viruses. The distribution method adopted for this research involved using a web based questionnaire and posting adverts on various social media web pages. This method avoids all of the concerns identified above.

Saunders *et al* (2010) recommended ensuring the following when using web based questionnaire distribution:

1. Ensure the web site explains the purpose of the research (this takes the place of the covering letter)
2. Ensure the web site provides a hyperlink directly to the questionnaire
3. Advertise the website/weblink via a range of media
4. When the respondent completes the questionnaire, ensure that the data file is automatically saved
5. Ensure that no individual can complete the questionnaire more than once.

The website used for the distribution of the questionnaire was esurveycreator.com which stores the data on multiple servers in the EU and is required, therefore, to comply with European legislation relation to the privacy of information. The data is also backed up regularly to internet inaccessible locations in order to protect data from web based corruption.

3.6 Data Analysis

3.6.1 Data Screening

Once the data had been collected, it was screened for a number of characteristics that may be detrimental to the validity and reliability of the results; a number of filters were used. Firstly, responses in which the respondents said their purpose of trip was either business or specifically to visit friends or relatives who lived at the destination were deleted as their destination decision would have been unduly influenced. After this, responses which took less than eight minutes to complete were also screened individually as the pilot study revealed that full completion requires at least eight minutes. These responses were checked to ensure that they did not contradict themselves, for example, if a respondent said that they did need to search for information about their destination but did not state that any sources were used, they were deleted from the results.. While not all questions were compulsory, there were a number of questions that became compulsory depending on the respondents' answers to questions previously asked. Question four asked respondents if they needed to find information about their alternative destinations before they made their decisions and question 11 asked respondents to identify the information sources used to research the alternatives. If the answer to question four was yes, but no information sources were identified in question 11, the file was deleted. Question nine asked respondents to identify any alternative destinations that they researched which then required a corresponding reason for rejection in question 12. If question 12 was not completed appropriately, the file was deleted. Similarly, question 13 asked respondents about destinations that they considered but did not actively research and question 15 asked for the reason that these were rejected from further consideration. If respondents identified destinations that they considered but did research, there needed to be corresponding responses to question 15; where there were not, the file was deleted.

3.6.2 Statistical Data Analysis

The data were analysed using IBM's SPSS Statistics software package. The data were first analysed to test the descriptive validity of the Composite Choice Set model put forward in this research as well as the ontological veracity of the individual choice sets included in the model. Frequency analysis was used to identify the number of respondents who used each individual set (e.g. respondents who stated that they ruled out a destination in the early consideration stage because they perceived it to

be not realistically possible verified the requirement for an unavailable set). Cross tabulation and chi squared tests for independence were applied to the data which was obtained regarding choice alternative elimination in the early consideration stage of the decision making process and information source usage to establish significant relationships between these variables.

Information source utility as a construct, was tested for validity using correlation analysis as well as multicolinearity diagnostics in order to ensure that the construct had both convergent and divergent validity, and to ensure that the items used to measure the construct are not contaminating each other and therefore detracting from the reliability of the measure.

To analyse the influence of the perceptions of each information source on whether the source was used or not, logistic regression analysis was conducted. The results of logistical regression analysis identify whether relationships are statistically significant as well as the relationship between the perception of the source and the likelihood of the source being used in the destination decision making process. Logistic regression analysis was also applied to the relationship between the use of an information source to research a destination, and the outcome of the decision. Each source was tested through this technique to see if its use increased or decreased the likelihood of a destination being selected.

The influence of demographics on the choice of information source were analysed through chi squared tests for independence and finally, logistic regression analysis was used again to identify relationships between the use of specific information sources and the likelihood of the destination being selected for each demographic variable, i.e. the relationship between source usage and destination selection for each age category, then for each gender, then for each level of household income and so on.

Chapter 4 – Results and Discussion

4.0 Overview of Chapter

This chapter aims to present the findings of the analysis which was conducted on the primary data that was collected in order to address the aim and objectives of the research. The presentation of the results as well as the discussion of their significance will be conducted simultaneously in order to aid the contextual interpretation of the results. To begin with, the aim and the objectives of this research will be reviewed in order to reinforce top of mind awareness of the goals that were intended to be achieved. The remainder of this chapter will be organised as follows;

1. Presentation of the sample characteristics
2. Analysis of the results pertaining to the hypothesised Composite Choice Set model
3. Analysis of information sources used during the destination decision making process
    a. Analysis of information sources used in the early consideration stage
    b. Analysis of information sources used in the late consideration stage
        I. Testing the construct of perceived utility of tourist information sources
        II. Analysis of the perception of the information sources
        III. The influence of perception on the use of sources
        IV. The relationship between the use of an information source and the likelihood of the destination research though that source being selected
    c. Analysis of demographic differences in tourist information source usage

4.1 Aim and Objectives

The aim of this research was to identify the role of tourist information sources within the destination decision making process. This is interpreted as meaning to formulate a clear understanding of the destination decision making process manifested in a structured and systematic framework. Furthermore, the aim also includes the requirement of analysing when, how and why tourist information sources are used (or not) and the influence that they exert on the decision making process. The objectives of this research are therefore;

1. To identify the destination decision making process and the individual choice sets which define the decision making process

2. To identify the role of tourist information sources within the decision making process

4.1.1 The Characteristics of the Sample

Table 6 summarises the participants' characteristics in terms of overall number (N), and valid percent which represents the percentage values of those who did complete the each question which related to demographics. The data were screened as discussed in Section 3.8.1 to remove responses that were inappropriately filled in. The remaining respondents (n = 590) were then filtered to exclude travellers who stated that the main purpose of their trip was for business, visiting friends and relatives or for education in order to ensure that the decision making process was free of unwanted externalities which may dictate destination choice[18]. The remaining 475 respondents represent decision makers who have a free choice over their holiday destination and therefore engage in a complete decision making process. Respondents who stated that they visited friends or relatives as part of their trip, but did not choose to visit that destination for the specific purpose of visiting friends and relatives were included in the analysis. This was because respondents involved in the protocol analysis stated that they were not obliged to visit that destination and they considered a number of alternatives, therefore their responses were still valid. The number of respondents who completed the demographic questions varied between 337 and 378 (some respondents did not complete all demographic questions), and in total, there were 475 responses that were usable for different purposes.

The overall profile of the sample is comparable to other research which has been conducted on the tourist destination decision making process and tourist information sources (e.g. Sparks and Pan, 2009; Cho and Sung, 2012; Kucukusta *et al*, 2015).

[18] Some respondents within the leisure only subsection went on to state that they visited a particular destination in order to visit friends and relative, but they had previously not selected VFR as the main reason for their holiday.

Table 6; Demographic Breakdown of Respondents

	Total	Valid Percent
Total	590	
Purpose of Trip		
Leisure	475	80.5%
Other	115	19.5%
	590	100%
Of Leisure Traveler Subset		
Age Group		
16 – 24	120	32.1%
25 – 34	109	29.1%
35 – 44	82	21.9%
45 – 54	44	11.8%
55 +	19	5.1%
	374	100%
Gender		
Male	150	40.0%
Female	225	60.0%
	375	100%
Level of Education		
High School	17	4.5%
Undergraduate	183	48.4%
Postgraduate	133	35.2%
Professional Qualification	45	11.9%
	378	100%
Household Income		
Up to £11,999	62	16.6%
£12,000 – £23,000	91	24.3%
£24,000 – £39,000	85	22.7%
£40,000 – £80,000	97	25.9%
Over £80,000	39	10.4%
	374	100%
Travel Party		
On my own	31	9.2%
With partner only	125	37.1%
With children	75	22.3%
Adult only group	104	30.9%
Other	2	0.6%
	337	100%

4.2 Results pertaining to choice set model

This section focuses on the mechanics of how destinations pass through the decision making process and why they are chosen or rejected; the discussion is framed using the Composite Choice Set Model proposed in this research (see Chapter 2). Following on from this, this section includes a discussion of the heuristics which play a role within the decision making process. The results and discussion pertaining to the role of information sources is left until Section 4.3.

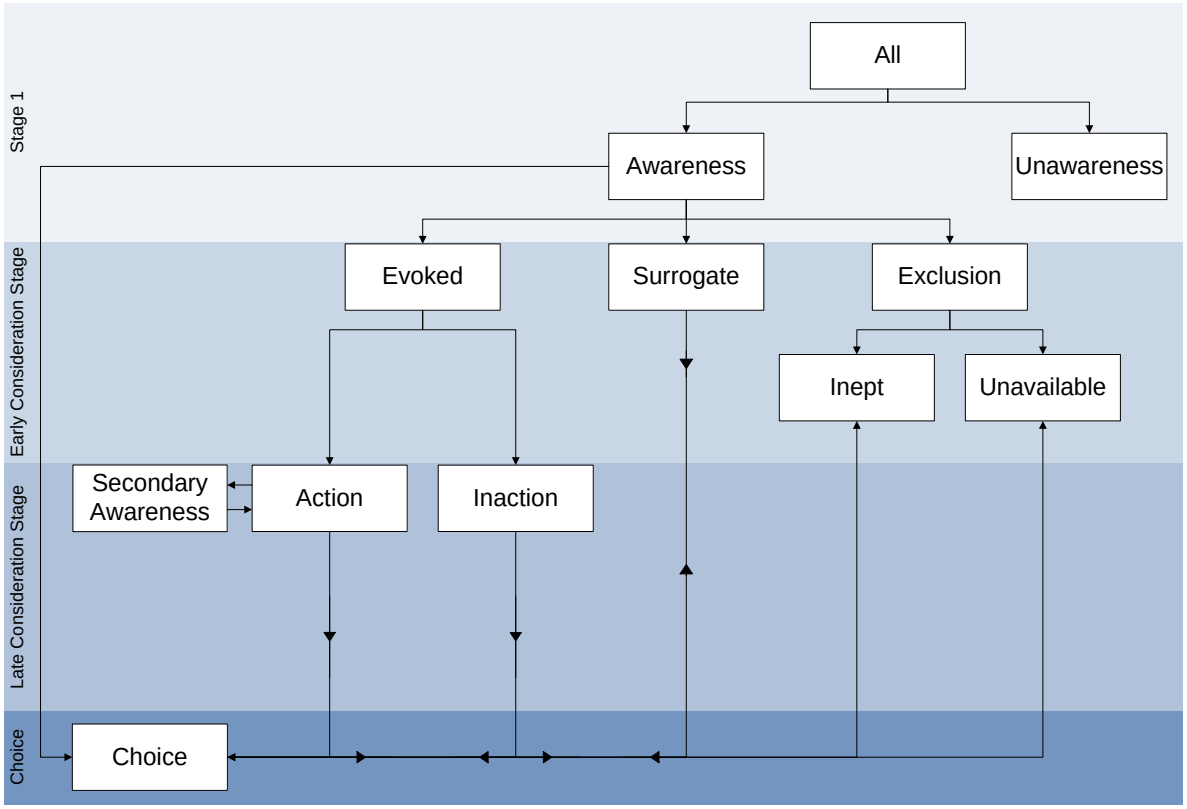
4.2.1 Results and Discussion of the Composite Choice Set Model

Figure 9 below is the composite choice set model which was proposed in Chapter 2 of this research; the model is based on those of Crompton (1992) and Decrop (2010) and represents the dynamics of destination choice, how a large number of choice alternatives are filtered down to one final chosen destination and the reasons why unsuccessful destinations are eliminated. The primary data acquired during this research were used to test the veracity of the overall model as well as the existence and relevance of individual sets. The 475 respondents who provided usable responses included an aggregate total of 1398 destinations that were included in the destination decision making process – these included the 475 destinations that were eventually chosen by the decision makers, and also those that were also considered and rejected within the decision making process. The results of the research were analysed in two ways; firstly, by the number of respondents who allocated destinations to specific sets (e.g. the number of people that excluded a destination because it was unavailable), and secondly, the number of destinations that comprise each individual set.

Stage 1 of the model was not included in the research and analysis as explained in Chapter 3 (requesting that respondents identify all destinations that they are aware of is excessively time consuming and the information has little or no value). The analysis therefore began at the Early Consideration Stage. Analysis of results pertaining to this stage reveals that of the 475 decision makers, 158 (33.3%) did consider destinations that they did not research further (Table 7). This result verifies the existence of early consideration stage in the decision making process – the stage in which some alternatives are eliminated before information is actively sought. The inclusion of this

stage of the decision making process is consistent with the findings of Crompton (1992) and Decrop (2010) who both acknowledge that some choice alternatives are filtered out of the process without being researched.

Figure 9: The Composite Choice Set Model



Source: Bell (2016)

Table 7: Were there any destinations you thought about but did not look for information about?

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	158	33.3	33.3	33.3
No	317	66.7	66.7	100.0
Total	475	100.0	100.0	

In Table 8 it can be seen that of the respondents who had eliminated one or more destinations in the early consideration stage, 65 (41.1%) stated that they did so because they considered the destination to not be good enough for further consideration, thus making it inept. 102 (64.6%) people excluded at least one of the destinations in the early consideration stage because they considered the destination to be not realistically possible, i.e. unavailable. Finally, 62 (39.2%) people stated that they excluded one or more destinations because it was not considered to be as good as other destinations that they were considering.

The results presented in Table 8, which demonstrate the elimination of a number of choice alternatives prior to information search, are consistent with the research agenda on choice set theory and the destination decision making process presented by authors such as Crompton (1992) and Decrop (2010). Both of the choice set models presented by Crompton (1992) and Decrop (2010) (upon which the composite model included in this research is based) include a stage whereby alternatives are eliminated relatively early in the decision making process. Crompton's model, however, eliminates destinations from active information search for being either inept or inert, but not because they were seen to be unavailable to the decision maker. Decrop's (2010) model does include an unavailable set, but only after the smaller, 'evoked' set is created which includes the actively researched destinations. The Choice Set model put forward in this research proposed that respondents eliminate choice alternatives because they perceive them to be inept, unavailable or surrogate before the active information search stage begins. While it is not expected that all destination decision makers rule out destinations for each of the three reasons, the evidence to support this proposal can be seen in the relatively large number of respondents who did populate each choice set – if the percentage of respondents populating any of the three sets was small, it could have been argued that this set was an anomaly or irrelevant.

The Evoked Set of the composite choice set model comprises all of the destinations that have not been ruled out at the Early Consideration Stage and is a set which is common in choice set models put forward by various authors, albeit under different names (e.g. the evoked set (Decrop, 2010), the consideration set (Crompton, 1992; Prentice, 2006). The primary research confirmed that this set is a requirement as first of all, it is the group of alternatives that have not been eliminated at the ECS, and secondly because the destinations which it comprises are then divided into two distinct sets – those which require actively information search and those which do not. Prentice (2006) also drew the distinction between an Evoked and Action Set, the former preceding the latter in the decision making process.

Table 8: Reasons for excluding destinations at the Early Consideration Stage

	Frequency	Percent
Inept		
Yes	65	41.1%
No	93	58.9%
Total	158	100%
Unavailable		
Yes	102	64.6%
No	56	35.4%
Total	158	100%
Surrogate		
Yes	62	39.2%
No	96	60.8%
Total	158	100%

Of the 475 respondents, 440 (92.6%) stated that they needed to undertake an active information search process in order to learn more about their choice alternatives, thus creating the population of the Active Set (Table 9). According to Crompton (1992) the destinations in the Active Set will be thoroughly researched to evaluate their relative utility and to enable the final choice to be made. While the majority of respondents did require information to guide their decision, 35 (7.4%) did not demonstrating a requirement for an Inaction Set. Further analysis of the results shows that of the 35 people who did not require information before deciding on their holiday destination, 20 (4.6%) had been to their chosen destination before, implying that they rely on internal information sources. These findings are consistent with the relevant literature on destination loyalty, for example, as stated by Jacobsen and Munar (2012, p. 39), 'repeat visitors to a place may not always wish to collect additional information from external sources as they can rely much on past experiences'. It is also consistent with research on the effect of prior knowledge on information search by authors such as Johnson and Russo (1984) and Moorthy et al (1997) who identified that after a certain point, the more a destination decision maker knows about a destination, the less information they search for. Literature also provides an explanation as to why the remaining 15 (3.4%) respondents did not need to look for information; Decrop (2010) suggested that a direct link between awareness and choice may be required as 'evaluation is not always necessary for choice' (Decrop, 2010, p. 110).

Decrop (2010) cites the research of Nedungadi (1990) who found that some decisions are entirely memory based. None of the 15 considered other destinations.

Table 9: Did you need to search for information before your trip?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	440	92.6	92.6	92.6
	No	35	7.4	7.4	100.0
	Total	475	100.0	100.0	

The Secondary Awareness Set represents destinations that decision makers discover during the active information search stage and is an original set which was not included in the models by either Crompton or Decrop. Decrop did, however, acknowledged the possibility of a 'sudden awareness of a previously unknown destination' (Decrop, 2010, p. 108) and the validity of this set is further supported by the research of Prentice (2006) who introduces a 'Late Awareness Set' which stems from the Action Set, but he does not go on to fully explain. The Composite Choice Set model includes this possibility and the results of the primary research (Table 10) found that 64 respondents (13.5%) stated that they had been guided towards a destination that they had not previously considered during the process of their information search which supports the requirement for this set.

Table 10: When you were looking for information about the destinations you were considering, were you guided to a resort or city that you had not considered before you began actively searching?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NA	58	12.2	12.2	12.2
	Yes	64	13.5	13.5	25.7
	No	353	74.3	74.3	100.0
	Total	475	100.0	100.0	

275 (57.9%) of respondents did not research any alternative destinations (Table 11) which is consistent with the results of Decrop (2010) in which 11 out of 21 respondents in his sample considered only one destination. Further analysis of this group shows that of those 275, 189 (68.7%) people agreed that they were visiting that destination because of a specific person or attraction there which explains the lack of alternatives considered. Of the remaining 86 (31.3%) respondents, destination loyalty and recommendations from friends and families once again appear to be a big influence on destination choice with 22 (8%) people saying they chose the destination because they had been there before, and 49 (17.8%) people because it was recommended by a friend or relative. Of the respondents that did research more than one alternative, the average number of alternatives in the evoked set was 2.59 destinations, which is within Bronner and de Hoog's (1985) Woodside and Sherrell's (1977) proposition of 4 (± 2) destinations and almost identical to the number found by Perdue and Meng (2006) which was 2.6.

Table 11: Number of Alternative Destinations Researched

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no alternatives	275	57.9	57.9	57.9
	1 destination	54	11.4	11.4	69.3
	2 destinations	55	11.6	11.6	80.8
	3 destinations	47	9.9	9.9	90.7
	4 destinations	19	4.0	4.0	94.7
	5 destinations	13	2.7	2.7	97.5
	6 destinations	12	2.5	2.5	100.0
	Total	475	100.0	100.0	

The final element of the choice set model that requires analysis is the dynamics involved in rejecting alternatives from the Evoked Set. Of the 200 people who rejected an alternative after the active research stage, 104 (52%) people did so because they did not perceive a destination researched to be as good as the alternative that they chose, 81 (40.5%) because, after research, they found an alternative to be inept and 107 (53.5%)[19] because they established that an alternative is not a realistic option and therefore unavailable. The behaviour of the respondents is consistent with similar research on destination decision making; Perdue (2006) and Tomigova *et al* (2015) both found that decision makers rejected alternatives as they found them to be either too expensive (unavailable) or would take too long to get to (inept).

[19] Percentages do not need to add up to 100% as respondents may eliminate more than one destination

The findings of this research pertaining to the structure of the destination decision making process support hypothesis one and hypothesis two.

H1: The Composite Choice Set Model, proposed in this research, is an accurate representation of the mechanics of the decision making process.

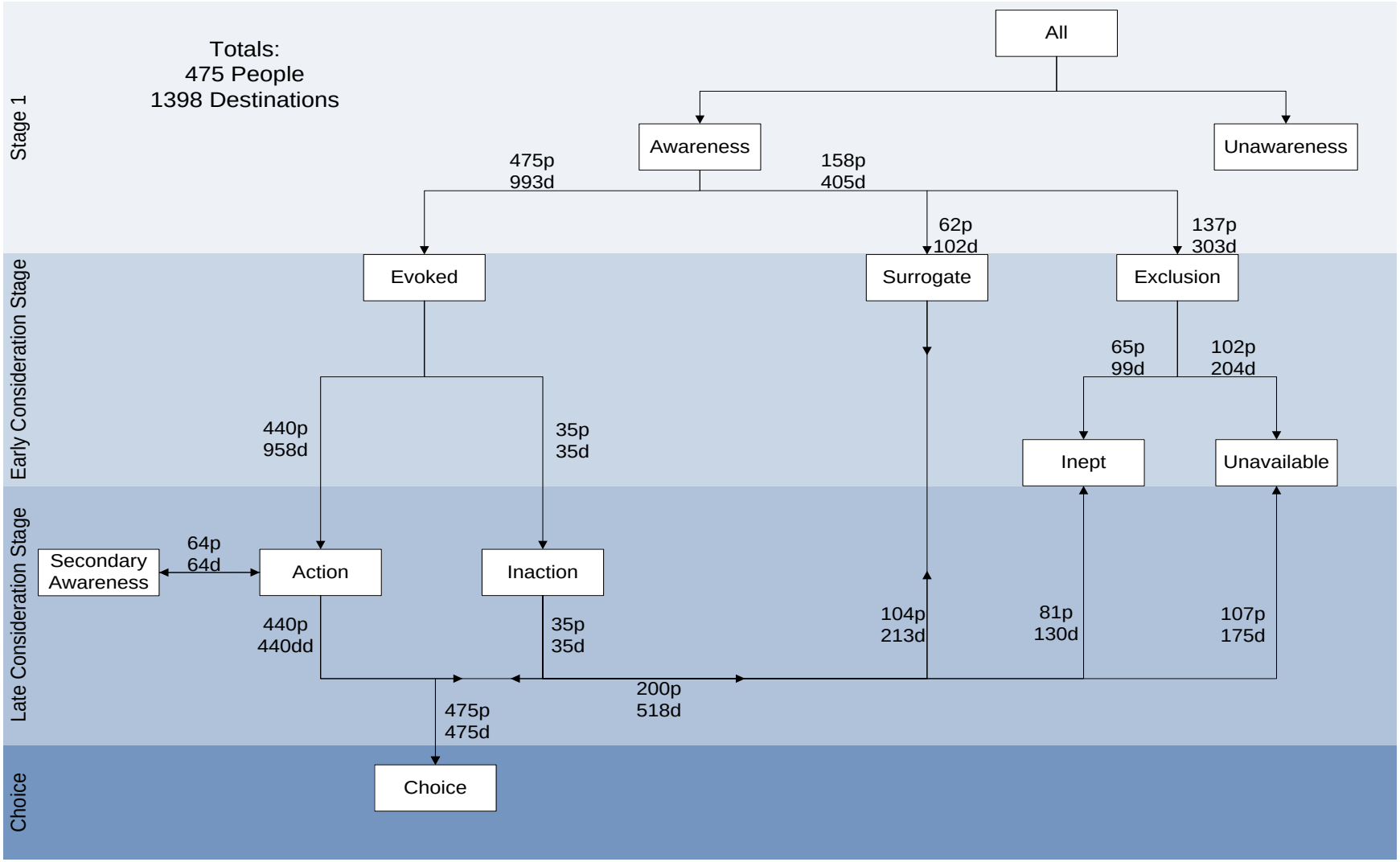
The implication of this is that the Composite Choice Set model can be used in future research as a framework upon which to develop more in depth research which focuses on more specific elements of the destination decision making process, such as the role of images and text in promotional media or the facets of destinations that are prioritised as part of the heuristic process. By using one, empirically proven framework, research can be developed and applied to the overall decision making model to enhance knowledge of particular stages; it can also be repeated periodically to identify changes in social trends relating to tourist information source usage as well as the destination decision making process and therefore evolve into research of a longitudinal nature. This would not be possible without a constant frame of reference such as the Composite Choice Set model.

H2: Each individual choice set is hold ontological validity.

This adds further credibility to the design of the Composite Choice Set model as it implies that each of the sets identified within the model is a necessary requirement and representative of the possible outcomes for a destination that is considered during the decision making process. It also means that further research can be done into the characteristics of the destinations which fall into each category within specific contexts; for example, for tourists from the North West of England considering a main summer family holiday, which destination facets are most likely to render a destination unavailable? Price? Distance from home? Availability of a kids club? As another example, research may be conducted which serves to develop our understanding on how destinations that form the secondary awareness set emerge; how is that awareness created? Which information sources were involved in developing that awareness? Is there an opportunity for partnerships to be developed between destinations or destination marketers?

Figure 10 , which was described in section 3.2, displays the Composite Choice Set Model including the number of people (p) and destinations (d) that make up each set and the reason for alternatives to be excluded or, ultimately, selected.

Figure 10 The composite Choice Set Model including the number of people (p) and destinations (d) that comprise each set.



4.2.2 Heuristics in the Decision Making Process

The role of heuristics in the decision making process was introduced in Chapter 2, and the results found in this research demonstrate their involvement in destination decision making. More specifically, the use of heuristics, which were defined by Bettman *et al* (1991, p. 55) as 'procedures for systematically simplifying the search through the available information about a problem', was prevalent in the Early Consideration Stage where destinations were eliminated prior to information search in order to reduce the complexity of the decision. Shah and Oppenheimer (2008) identified the examination of fewer alternatives as one specific method of simplifying complex decision making situations and respondents to this research demonstrated this behaviour in the Early Consideration Stage by eliminating a number of choice alternatives before they expended time, money and energy in researching the alternatives. The results discussed above demonstrated that of the 475 respondents, 158 (33.3%) eliminated a total of 369 destinations without actively researching them. Further evidence that this behaviour represents the application of heuristic strategies can be seen in the fact that 62 (39.2%) of the relevant respondents did not permanently exclude some destinations, but held them as surrogates to be considered only in the event of the destinations in the Evoked Set proving to be inept or unavailable. This is a clear example of alternatives not being rejected for being inept or unavailable, but because the decision maker wanted to simplify the decision making process.

The heuristic strategy employed by the respondents will vary depending on a number of factors, including person and holiday specifics. This research does not go so far as to analyse the role of heuristics in the decision making process in an extensive manner – this could be a research project on its own. However, it can be seen that destinations that are eliminated due to being perceived as unavailable are conforming to the Conjunctive Decision Making rule which applies a must/must not have criteria to alternatives (Hauser, 2014). Destinations which are perceived to be too expensive or inaccessible, for example, are eliminated and move in to the unavailable set.

Destinations which are assigned to the Inept set are those are available and are therefore possibilities, but are then ruled out based on other criteria. For the destination to be excluded means that it is perceived to be below a certain standard which the Decision Maker requires. This is representative of Tversky's (1972) Elimination by Aspect heuristic which ascribes minimum acceptable levels for certain attributes of the destination. 65 (41.1%) of relevant respondents stated

that they ruled out a destination as they considered it inept, meaning that they had created minimum acceptable levels for aspects of the holiday and the destinations were perceived to fall below that level.

As discussed in Chapter two, both the Conjunctive Decision Making rule and the Elimination by Aspect heuristic are forms of non-compensatory heuristics, i.e. those in which alternatives must conform to certain demands. Perdue (2006) also found evidence of non-compensatory heuristic being applied to rule out destinations from further consideration and went on to claim that the reasons destinations were chosen were separate from the reasons that destinations were rejected, i.e. if the destination meets the criteria it is then assessed on another criteria.

Hypothesis three, shown below, can only be partially supported as it can be seen that respondents have used non-compensatory heuristics to eliminate destinations which are inept or unavailable. However, it has not been proven that compensatory heuristics have not also been used in the Early Consideration Stage or that non-compensatory heuristics have not also been used in the late consideration stage.

H3; non-compensatory heuristic strategies are applied at the Early Consideration Stage, and compensatory heuristics are applied in the Late Consideration Stage.

Further research would be required to test and develop our understanding of the heuristic strategies that are applied at the early and late consideration stages, however, the results of this research do support the notion that heuristics play an important role in simplifying complex decisions by reducing the number of alternatives researched in the active information search stage. Woodside and Sharrell (1977) set this number at 4 ± 2 destinations, Crompton and Ankoma (1992) at two to five destinations and Decrop (2010) at one or two. Within this research, of the respondents who considered more than one alternative destination, the mean number of destinations considered was 2.59 which is consistent with the findings of the authors quoted above.

4.3 Analysis of the Information Sources used During the decision making Process

Having provided empirical support for the choice set model presented in this research, the chapter will now continue by analysing the role of tourist information sources used in the destination decision making process. The discussion follows a top down approach, beginning with the information sources that created awareness of the destinations and those used in the Early Consideration Stage. Following on from this, sources accessed at the Late Consideration Stage are analysed in detail to uncover how they are used to aid destination decision making.

4.3.1 The Awareness Set

Initially, for destinations to be included in the Early Consideration Stage, decision makers must have an awareness of those destinations. While this awareness may have originated from previous experience, initial awareness often originates from external sources including friends and relatives and the media such as adverts produced by destination management organisations. Luecke's (2003) research into advertising effectiveness showed that digital media including TV was more effective than printed media in creating enduring images of tourist destinations than printed sources. Kim *et al* (2005) also found that although printed media allows for the formation of rational and considered images over a longer period of time, the recalled awareness of adverts for a destination was higher when they are delivered via digital media rather than printed media. Their research did not include friends and relatives as an information source through which awareness is created, but these three predominant sources, digital media, printed media and friends and relatives have been compared in this research. The data correspond to the 158 people that stated that they considered a total of 405 destinations which they did not go on to research actively, i.e. they were aware of the destinations, but eliminated them at the Early Consideration Stage. The rationale for selecting this group of respondents rather than the overall sample is that they are making decisions based on internally sourced information (i.e. from memories of adverts or discussions) and therefore did not have contact with destination information through their active information search which may interfere with the veracity of their responses.

Table 12: Do you remember hearing about the destination from the following media?

	Digital	Percent	Print	Percent	Friends and Family	Percent
Yes	258	63.7	222	54.8	270	66.7
No	147	36.3	183	45.2	135	33.3
Total	405		405		405	

Of the 405 destinations that were the subject of this element of the research (presented in Table 12), results show that respondents recalled 270 (66.7%) of destinations being talked about by friends and relatives. This was the most frequently recalled source of the three involved at this stage of the decision making process which serves to once again emphasise the resilience of word of mouth as a prominent information source. Respondents remembered hearing about 258 (63.7%) of the destinations through digital sources, and finally 222 (54.8%) of the destinations were remembered from printed information relating to the destination. With regards to digital and printed sources, the results of this research demonstrate that digital media is more effective than printed media in creating destination awareness. While Kim *et al* (2005) did not include friends and relatives as an information source in their research, their results for digital and print media were similar to those in this research; 68.4% of their respondents remember digital adverts and 48.9% remember printed adverts. When friends and relatives were included in research, authors such as Dey and Sarma (2010) found word of mouth communication to be ranked above digital and print sources as a medium for creating destination awareness. Choi *et al* (2012) also found friends and relatives to be the most influential source in the early stages of destination decision making with 65.9% of their respondents remembering hearing about a destination through this source. The results of this research are not entirely consistent with those found by Sparks and Pan (2009) whose respondents ranked television first (60%), followed by friends and relatives (57%) and then printed sources (54%), however, the percentage scores for both digital/television and printed media are very similar to those of obtained in this research.

Overall, the results pertaining to the power of the three passive information sources to create long term awareness of a destination reflect those found in similar studies. Word of mouth communication continues to be the most enduring source, followed by digital media and finally printed media. Daft and Lengel, (1984) provide an explanation for the endurance of information

shared verbally by friends and relatives, citing the social aspect of sharing travel experiences and its richness as a way of communicating through numerous cues.

4.3.2 The Early Consideration Stage

Having identified which sources create the strongest top of mind awareness for destinations, further analysis was conducted into the effect that these information sources have on how the destinations are perceived. At this stage of the decision making model, destinations are either placed in the exclusion set because they are seen to be either inept or unavailable, surrogate set or evoked set. If there are significant relationships between information sources that create awareness of destinations and the way in which they are subsequently perceived and treated, it is important for marketing groups to understand these relationships in order to maximise the efficiency of their communication resources.

An initial inspection of the results appeared to suggest that destinations that had been seen though digital media were less likely to be considered inept than destinations that had not been seen in digital media (see Table 13). Of the 146 destinations that had not been seen in digital media, 40.4% (n = 59) were considered inept; this figure dropped to 29.3% (n = 76) if the destination had been seen in digital media. These results were tested for significance using a chi-square test for independence and the results supported the existence of the relationship; $x^2(1, n = 135) = 4.660$, $p = .031$, *phi* = -.113. The results of the chi-square test for printed media and friends and relatives found no significant relationship between these sources and destinations being considered inept. This was not unexpected as Pan (2009) and Pan *et al*'s (2011) research on the effect of watching TV adverts on inclination to visit the destination featured in the advert found that this type of media is a powerful positive image formation agent. Furthermore, these results are similar to the research findings of Kim, Hwang and Fesenmaier (2005) who found TV (digital) media to be more effective than printed media in creating advertising awareness which, importantly, was then converted into requests for information. In their research, 14.9% of respondents who remembered a destination from a TV advert went on to request information; this figure decreased to 8.6% for respondents who remembered destinations from printed sources. Clearly these results show that digital media is more effective than printed media and friends and relatives in creating a positive image of the destination and avoiding it being perceived as inept.

Table 13: Crosstabulation; Do you remember hearing about the destination through a digital information source * Did you exclude the destination as inept?

			Excluded Inept		Total
			Yes	No	
Digital Source	Yes	Count	76	183	259
		% within Digital	29.3%	70.7%	100.0%
	No	Count	59	87	146
		% within Digital	40.4%	59.6%	100.0%
Total		Count	135	270	405
		% within Digital	33.3%	66.7%	100.0%

The results were next analysed to identify whether the type source that created the awareness had an effect on whether the destination was perceived to be unavailable. Digital and printed media were both found to have a significant influence on whether a destination is considered unavailable or not (see Table 14 for digital media and Table 15 for printed). Perhaps unexpectedly, there was a positive correlation between a destination being seen in both digital and printed media and that destination being rejected as unavailable. 57.9% (n = 150) of destinations that had been seen in digital media were considered unavailable compared to only 37.0% (n = 54) of destinations that had not been seen in digital media ($x^2(1,n = 204) = 15.553$, $p = <.001$, $phi = .201$). While the effect size for printed media is smaller, there is still a significant difference in the number of destinations considered unavailable that had been seen in printed media (55.7%, n = 123) and those that had not (44.0%, n = 81), ($x^2(1, n = 204) = 4.981$, $p = .026$, $phi = -.116$). This may be put down to the fact that both digital and printed media are indiscriminate mass media channels which successfully serve to raise awareness, but do not necessarily serve specific needs of specific individuals in the audience. For this reason, while destinations may be presented in such a way as to induce a positive image, the content of the message may present what may be considered structural or situational inhibitors which rule them out of further consideration. As destinations that had not been heard about through digital or printed media were less likely to be rejected as unavailable, this implies that the information source that created the awareness (e.g. friends and relatives) is more effective in persuading the decision maker that the destination is a viable option. Decrop's (2010) qualitative research also uncovered awareness of destinations that were perceived positively, but that were not realistic alternatives.

Table 14: Crosstabulation; Do you remember hearing about the destination through a digital information source * Did you exclude the destination as unavailable?

			Excluded Unavailable		Total
			Yes	No	
Digital Source	Yes	Count	150	109	259
		% within Digital	57.9%	42.1%	100.0%
	No	Count	54	92	146
		% within Digital	37.0%	63.0%	100.0%
Total		Count	204	201	405
		% within Digital	50.4%	49.6%	100.0%

Table 15: Crosstabulation; Do you remember hearing about the destination through a printed information source * Did you exclude the destination as unavailable?

			Excluded Unavailable		Total
			Yes	No	
Printed Source	Yes	Count	123	98	221
		% within Print	55.7%	44.3%	100.0%
	No	Count	81	103	184
		% within Print	44.0%	56.0%	100.0%
Total		Count	204	201	405
		% within Print	50.4%	49.6%	100.0%

Digital and printed media was also found to have a significant impact on whether a destination is held as a surrogate or not (Table 16 for Digital Media, Table 17 for Printed Media). For destinations that were seen in digital media, only 12.7% (n = 33) were held as a surrogate compared to 22.6% (n = 33) of destinations that were not seen in digital media ($x^2(1, n = 66) = 5.715$, $p = .017$, $phi = -.126$). Once again, printed media produces similar results; 10.4% (n = 23) of destinations seen in printed media held as a surrogate compared to 23.5% (n = 43) that were not held as a surrogate ($x^2(1,n = 66) = 11.746$, $p = .001$, $phi = -.177$). These results are similar to the results for destinations excluded because they were perceived to be unavailable; digital and printed media may be effective in creating an awareness of destinations amongst decision makers, and they may present positive images, but they are ultimately not as suitable to the destination decision makers' requirements as other alternatives that are available.

Table 16: Crosstabulation; Do you remember hearing about the destination through a digital information source * Did you hold the destination as a surrogate?

			Excluded Surrogate		Total
			Yes	No	
Digital Source	Yes	Count	33	226	259
		% within Digital	12.7%	87.3%	100.0%
	No	Count	33	113	146
		% within Digital	22.6%	77.4%	100.0%
Total		Count	66	339	405
		% within Digital	16.3%	83.7%	100.0%

Table 17: Crosstabulation; Do you remember hearing about the destination through a printed information source * Did you holf the information source as a surrogate?

			Surrogate		Total
			Yes	No	
Printed Source	Yes	Count	23	198	221
		% within Print	10.4%	89.6%	100.0%
	No	Count	43	141	184
		% within Print	23.5%	76.6%	100.0%
Total		Count	66	339	405
		% within Print	16.3%	83.7%	100.0%

When rejected destinations had been recalled from information provided by friends and relatives, no significant differences were found from destinations not heard about by friends and relatives as can be seen from Table 18 below which summarises the results discussed above.

Table 18: Passive Information Source and Destination Deselection at Early Consideration Stage

	Media Source Destination Seen In					
	Digital		Print		Friends & Relatives	
	Yes	No	Yes	No	Yes	No
Ruled out Inept	29.3%	40.4%	34.2%	32.8%	34.8%	31.1%
Ruled out Unavailable	57.9%	36.7%	55.7%	43.7%	47.4%	55.6%
Ruled out Surrogate	12.8%	22.4%	10.4%	23.5%	17.8%	13.3%

The results relating to the role of information sources in the Early Consideration Stage clearly demonstrate that digital media is highly influential in destination image formation. Digital media such as TV can be used to create a positive image of a particular destination, and although it may also include content that resulted in the decision maker considering that destination unavailable for the particular holiday in question, the creation of this positive image may have a long term effetc. As identified by Kim, Hwang and Fesenmaier (2005, p. 42) the creation of a positive image and TOM awareness 'play an important role in the purchase decision in a longer time frame' - the destination may be unavailable to the decision maker at this moment in time, but structural and situation inhibitors may change. To reduce the number of alternatives that are permanently excluded as unavailable, a more focused marketing strategy must be used which applies an understanding of the demographics of specific audiences as well as their general purchase intentions. Support for this conclusion can be found by looking at the number of destinations that are considered unavailable amongst the three information sources which stand at 57.9% (n = 150) for digital, 55.7% (n = 123) for print and only 47.8% (n = 129) for friends and relatives. The information provided by friends and relatives can be expected to be more relevant to the decision maker given the likely geographic and demographic closeness of this source. Furthermore, an increase in customisation is likely to be ever more achievable for marketers given the increasing ability to track and monitor individual behaviour through web based services such as on demand TV, web site visitation and online purchase patterns.

While it is recommended that further research be conducted into the effectiveness of information sources in the early consideration stage on specific markets, some preliminary analysis may be conducted from the results of this research. For example, results show that age has a significant effect on which information sources respondents recall hearing about destinations from, as can be seen in Table 19 below. While the number of respondents who heard about a destination from friends and relatives remained relatively stable for all age categories, recall from digital sources was skewed towards younger respondents. A chi square test identified this as a significant result; $x^2(1,n = 355) = 31.798$, $p = <.01$, *phi* = -.299. Results of research by Kucukusta *et al* (2015), which focuses on the perceived usefulness of online booking, found that younger generations found the internet to be more useful and easier to use than older generations, implying a closer affinity to a key digital information source.

Table 19: Age Groupings and Destinations Remembered from Information Sources

		Did you hear about the destination through the following source?		
		Digital Yes	Print Yes	Friends and Relatives Yes
Age	16 - 24	74%	59%	61%
	25 - 34	63%	53%	67%
	35 - 44	79%	71%	77%
	45 - 54	31%	50%	69%
	55+	25%	13%	75%

Gender is also significant as females are more likely to remember hearing about destinations through digital sources than males ($x^2(1,n = 355) = 4.459$, $p = .035$, $phi = -.112$). Analysis of the influence of the three key information sources against level of education, household income and travel party do not identify any significant relationships in the Early Consideration Stage. Further research (e.g. Gronflaten, 2009) on the relationship between demographics and information sources generally focuses on active information sources rather than the influence of passive sources on destination choice.

4.3.3 The Late Consideration Stage

At this point, in the late consideration stage, destination decision makers begin to actively research destination alternatives by engaging with external information sources. Decision makers will choose which information sources to engage with based on a number of factors. Salient literature (e.g. Ayeh et al 2013; Sparks *et al*, 2013; Kim *et al*, 2011; Tan and Chen, 2011; Frais et al, 2008; Molina, 2006) identifies four predominant characteristics that influence the decision to use an information source or not; its perceived level of bias, ease of access, how up to date the information is and the value that the source provides (where bookings are possible). Hypothesis four, tested within this research, is that these four key characteristics of tourist information sources combine to represent the overall perceived utility of the information source, and that the source is used is dependent on its perceived utility.

This section has five focal points; the first of which relates to tests for the validity of the construct of perceived utility and is a fundamental prerequisite for the inclusion of perceived utility in this research. The following four focal points are;

1. The results of t-tests exploring correlations between the perceived utility scores of information sources and their respective use in the decision making process
2. The results of logistic regression analysis to identify which of the key characteristics was the strongest influence on respondents' choice of information source
3. The results of logistic regression analysis to identify whether the use of an information source to research a destination is significantly correlated to the destination's selection or rejection

The analysis of demographic differences will be presented after the general findings have been discussed.

4.4 Analysis of the Validity of the Perceived Utility Construct

Before any analysis of relationships between utility and information source usage was conducted, it was necessary to test the validity of the overall construct of perceived utility of information sources. As it was necessary to identify the perceived utility of each source, it was also necessary to test whether the construct was valid for each source. Using Trochim's (2006) methodology, correlation matrices were created (see Figure 11 for an example) for each information source testing the key characteristics against the three items used to measure risk acceptability (acceptance of performance risk, physical risk and financial risk); the correlations were then analysed for convergent and discriminant validity. The results for all nine information sources demonstrated that the construct of perceived utility has discriminant validity[20]. Convergent validity was low to moderate, however, according to Carlson and Herdman (2012), in research in which the conceptualisation of a construct is in its relatively early stages, convergent validity is expected to be less well developed. As discussed in the literature review, the utility of information sources as a construct is in its infancy therefore convergent validity is expected to be low. An example of the correlation matrices is below (Figure 11) and full results can be found in Appendix 4.

[20] Local Tourist Board had two anomalous results out of 18, High Street Travel Agent's Web Site had one anomalous result out of 18

Figure 11: Correlation Analysis to Test the Perceived Utility Construct

	Information provided by owners or company representatives is unbiased	Information provided by owners or company representatives is up to date	Information provided by owners or company representatives is easy to access	Information provided by owners or company representatives is good value	When booking a holiday I am very concerned about financial risk.	When booking a holiday I am very concerned about performance risk.	When booking a holiday I am very concerned about physical risk.
Information provided by owners or company representatives is unbiased	1 347						
Information provided by owners or company representatives is up to date	.166** .002 345	1 348					
Information provided by owners or company representatives is easy to access	.223** .000 342	.291** .000 344	1 346				
Information provided by owners or company representatives is good value	.237** .000 338	.357** .000 340	.396** .000 340	1 342			
When booking a holiday I am very concerned about financial risk.	.086 .109 345	.094 .081 346	-.001 .985 346	.098 .070 342	1 351		
When booking a holiday I am very concerned about performance risk.	.068 .210 345	.116* .031 346	.046 .398 345	.052 .336 341	.537** .000 350	1 351	
When booking a holiday I am very concerned about physical risk.	.132* .014 344	.052 .336 345	.013 .814 345	.071 .191 341	.493** .000 349	.504** .000 348	1 349

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Having tested the overall construct validity, multicollinearity diagnostics were conducted to analyse the relationships between the variables to ensure that they are not contaminating each other and thus undermining the validity of the measures. According to Pallant (2010) the independent variables should have some correlation if they are measuring the same construct, but an excessively high correlation would mean that the result of one independent variable is influenced by the result of another. Pallant (2010) states that the Variance Inflation Factor (VIF) score which measures multicolinearity should be below 10 if the variables do not demonstrate multicolinearity; Allison (2012), however asserts that this threshold should be much lower to ensure validity, just 2.5. From Table 20 below, it can be seen that none of the independent variables scored above 2.5 meaning that they did not interfere with each other in a way that would corrupt the validity of the measures.

Table 20: Results of Multicolinearity Diagnostics

Source and Variable	VIF Score
Direct Communication	
Unbiased	1.078
Up to Date	1.174
Easy to Access	1.217
Good Value	1.303
Local Tourist Board	
Unbiased	1.103
Up to Date	1.204
Easy to Access	1.141
Good Value	1.161
High Street Travel Agent	
Unbiased	1.136
Up to Date	1.208
Easy to Access	1.186
Good Value	1.242
High Street Travel Agent's Web Site	
Unbiased	1.165
Up to Date	1.223
Easy to Access	1.207
Good Value	1.199
Online Only Travel Agent	
Unbiased	1.087
Up to Date	1.331
Easy to Access	1.174
Good Value	1.242
Printed Travel Guide	
Unbiased	1.044
Up to Date	1.107
Easy to Access	1.087
Online Travel Guide	
Unbiased	1.061
Up to Date	1.053
Easy to Access	1.061
Independent Traveller Review Sites	
Unbiased	1.135
Up to Date	1.158
Easy to Access	1.119
Friends and Relatives	
Unbiased	1.137
Up to Date	1.209
Easy to Access	1.096

4.4.1 Correlation Analysis between Perceived Utility and Use of a Tourism Information Source

Having satisfied that the construct and its measurement have validity, overall perceived utility scores were computed for each information source by calculating the sum of their mean scores for each of the key characteristics. These overall means which represent each sources' perceived utility can be seen in Table 21, which presents the results in ranked order (highest perceived utility score to lowest). These results may be compared to those of Jacobsen and Munar (2012) who researched the importance[21] of tourist information sources in the decision to travel to Mallorca, however, their research did not include user generated web content such as Tripadvisor (ITRS's), HSTA's or OOTA's as information sources. Jacobsen and Munar (2012) found that of the sources included in their research, Friends and Relatives were the most important source, followed by the web pages of the company. There was then a significant drop in perceived importance to travel agents' web sites and printed guidebooks and a further drop to the sources least used; LTB's and tourist blogs (which are distinct from ITRS's). The relative importance found by Jacobsen and Munar (2012) is largely the same as the relative perceived utility scores of information sources that were found in this research.

Table 21; Perceived Utility Scores of Tourist Information Sources

	Utility Score	Std. Deviation	N
Independent traveller review site	3.93	.686	351
Online only travel agents	3.80	.611	353
Friends and relatives	3.64	.729	350
Online travel guide	3.62	.595	352
Owner or company representative	3.38	.700	351
Local tourism board	3.32	.630	351
High street travel agents' web site	3.25	.686	348
Printed travel guide	3.11	.698	347
High street travel agent	3.06	.706	348

Hypothesis four was that the perceived utility of the information sources are correlated with their use in the destination decision making process; if the hypothesis was to be rejected, there would be no significant correlations between an information source's perceived utility score and its use in the decision making process. Table 22 below shows which of the information sources respondents stated that they used in the decision making process and this is again presented in ranked order.

[21] The construct of information importance was not discussed.

Table 22; when researching your destinations, did you use with the following information sources?

	Percent
Independent traveller review site	65.45%
Friends and relatives	64.77%
Online only travel agents	57.73%
Online travel guide	51.59%
Owner or company representative	42.05%
Local tourism board	37.95%
Printed travel guide	29.09%
High street travel agents' web site	26.82%
High street travel agent	21.14%

It can be seen that nearly identical ranking in both tables, however, in order to test the hypothesis empirically, independent-samples t-tests were carried out to explore relationships between the perceived utility of an information source and whether it was used in the destination decision making process. Table 23 provides a summary the results of the t-tests. For the correlations to be significant, the significance value must be equal to or below .05 and one can see that there are significant relationships between the perceived utility value of all information source and them being used. This means that the higher the perceived utility of an information source, the more likely it is to be used in the destination decision making process. Eta squared values which show the effect sizes are also presented in Table 23. According to Cohen (1988), Eta values of .01 represent a small effect; values of .06 represent a moderate effect and values equal to or above .14 represent large effects.

Table 23; Correlations between Perceived Utility of Information Source and their Use in the Destination Decision Making Process

	Sig. (2-tailed	Eta squared	N
Independent traveller review site	.000	.093	351
Friends and relatives	.000	.050	350
Online only travel agents	.000	.153	353
Online travel guide	.000	.087	352
Owner or company representative	.000	.175	351
Local tourism board	.000	.078	351
Printed travel guide	.000	.099	347
High street travel agents' web site	.000	.159	348
High street travel agent	.000	.203	348

The results of the independent-samples t-tests demonstrate that all relationships between perceived utility and use are significant and that the effect size is large (with one exception).

Hypothesis 4; the decision to use a specific information source in the destination decision making process or not is correlated to its perceived utility.

What this means to the marketers of tourism destinations (and of the elements that contribute to and benefit from the destination's attractiveness) is that the choice of communication channel is vital. Marketers of tourist destinations have limited resources that they can invest in marketing and promoting their destinations, and they can guide their investment decisions by developing an understanding of the perceived utility of the alternative information channels; destinations with a low perceived utility value may be avoided, while those with a high perceived utility value may provide a better return on investment.

This hypothesis was supported by the findings of this research. A comparison of these results to results of similar research is challenging due to the limited amount of literature available. As was discussed in Chapter Two, there are many authors who have conducted research relating to the utility of information sources (D'Alessio, 2015; Lam and McKercher, 2013; Nusair *et al*, 2013; Volo, 2010; Molina and Esteban, 2006; Bauer, 2005), however, the overwhelming majority do not explore utility as a construct, but merely use it as a byword for 'usefulness'. Only Nusair *et al* (2013) identify utility as a construct and advance a definition, the value of which to this research is limited as Nusair *et al* focus Generation Y's commitment to online social networks rather than the utility of information sources. Previous research has not explicitly identified the construct of perceived utility of information sources, confirmed the validity of the construct and applied it to subsequent research on the destination decision making process, therefore comparisons of these results to the research agenda is not possible.

4.4.2 Analysis of the Contributions of the Items to the Correlations

Having identified a correlation between perceived utility and the use of tourist information sources, further analysis was conducted in order to develop the understanding of why information sources

were or were not used in the destination decision making process. The perceptions that respondents had of the key characteristics of the information sources were measured on a five point Likert type scale, 1 being represented by Strongly Disagree and 5 being represented by Strongly Agree. The results for each information source are discussed in this section in terms of mean scores on the perception scale for each of the key characteristics. It is important to discuss the results in this manner as it will correspond with the results obtained from logistic regression analysis which are discussed later in this section.

Table 24 demonstrates the results of the question, 'do you consider the following information source unbiased?' The five sources perceived to be most unbiased are all non-commercial information sources (i.e. they do not gain financially if the decision maker chooses a one destination or another). The range of the mean scores for these five sources was 0.45; the mean score for the source seen to be least biased, ITRS's being 3.72 and the mean score for OTG's in fifth place being 3.27. There was a telling gap thereafter with all of the commercial information sources being perceived as much less unbiased. These results were expectable based on the findings of Money and Crotts (2003) who stated that commercial information sources hold less credibility. The strong performance of information obtained through friends and relatives is similar to the result of research by Mack *et al*, (2008) who measured the credibility of this source on an identical five point Likert scale and found a mean score of 3.94. This was compared to the mean scores for different types of online blogs which are not specifically included in this research. Tan and Chen (2011) also found that friends and relatives were seen to be the most credible source of information in the results of their research (which only considered non-commercial sources). Neither Mack *et al* (2008) or Tan and Chen (2011) specifically include online traveller review sites such as Tripadvisor in their research and Tan and Chen acknowledge that this exclusion is a limitation of their study. While Sparks *et al* (2013) focused their research on online travel reviews, their findings related to the credibility of the information and the inclination to visit the destination rather than the perceived credibility and the decision to use the source. Their findings did, however, identify a strong relationship between more credible web sites and a positive attitude towards the site.

Table 24; The Following Information Sources are Unbiased, 1 Strongly Disagree, 5 Strongly Agree

	N	Mean	Std. Deviation
Independent Traveller Review Sites	346	3.72	1.101
Friends and Relatives	345	3.55	1.188
Printed Travel Guides	343	3.30	1.029
Online Only Travel Agents	347	3.27	1.079
Online Travel Guides	345	3.27	.985
Local Tourist Board	341	2.72	1.074
High Street Travel Agents Web Site	341	2.66	1.074
High Street Travel Agent	339	2.58	.989
Owner or Company Representative	347	2.57	1.119

Table 25 shows the mean scores from the perception scale referring to whether the information sources are up to date. It can be seen that the owner or company representative is perceived to be the most up to date which is unsurprising given that they are the ultimate provider of transport and accommodation services. What the table also shows is that the two non-web based information sources, friends and relatives and printed travel guides, were the two sources perceived to be least up to date. There is no existing research which measures and compares the perceived currency of these tourist information sources, however, Gretzel and Yoo (2008), whose research focused on the use and impact of online traveller reviews, found similarly positive perceptions of the currency of the information provided by this source (65.3% of their respondents believed ITRS's to be up to date).

Table 25; The Following Information Sources are Up to Date, 1 Strongly Disagree, 5 Strongly Agree

	N	Mean	Std. Deviation
Owner or Company Representative	348	3.95	.886
Independent Traveller Review Sites	346	3.81	.962
Online Only Travel Agents	348	3.78	.896
High Street Travel Agent	340	3.55	.880
Online Travel Guides	342	3.53	.879
High Street Travel Agents Web Site	343	3.50	.901
Local Tourist Board	346	3.42	.930
Friends and Relatives	342	3.37	1.010
Printed Travel Guides	343	2.88	.963

Table 26 presents the results from the perception scale for the ease of access of each information source. Once again, it can be seen that non-web based information sources perform badly on this characteristic and comprise the three least accessible sources. Friends and relatives, one may argue, are also a non-web based information source, and they rank in the top half of this table. Friends and relatives, however, may be contacted through web based communication channels such as social media. While authors such as Jang (2004), Xiang and Gretzel (2010) advocate the importance of understanding the perceived accessibility of information sources, especially since the advent and proliferation of the world wide web, there has been no research which compares travellers perceptions of the accessibility of the information sources in a way that is comparable. Xiang and Gretzel (2010) and Nusair (2013), for example look specifically at the role and accessibility of social media/social networks but do not enumerate the perceived accessibility of the information source. Frais *et al* (2008) researched the role of travel agents and internet information providers and argued the importance of accessibility for information sources, but did not measure perceived accessibility.

Table 26; The Following Information Sources are Easy to Access, 1 Strongly Disagree, 5 Strongly Agree

	N	Mean	Std. Deviation
Independent Traveller Review Sites	348	4.26	.789
Online Only Travel Agents	349	4.19	.776
Online Travel Guides	344	4.07	.768
Friends and Relatives	345	4.02	.847
Local Tourist Board	346	3.82	.885
High Street Travel Agents Web Site	343	3.81	.942
Owner or Company Representative	346	3.48	1.088
High Street Travel Agent	340	3.18	1.101
Printed Travel Guides	346	3.15	1.062

The results of the final question relating to perceptions of information sources are presented in Table 27 below. The alternatives included in the question were limited to those through which destination decision makers could complete a booking. Online only travel agents comfortably lead this category as they are nearly half a point above Owner or Company Representative, the source in second place. HSTA's and HSTAWS's performed badly on this perception scale. Once again, little research which condenses the various tourist information sources into a discrete list and compares their perceived attributes has been conducted, preventing the results of this research to be compared. Sanchez *et al*'s (2006) research on perceived value of information search focused solely on travel agents and, furthermore, the aspects of the travel agent which were seen to offer value to

potential customers. Cho *et al* (2012) analyse the perceived value of information provided by local tourist boards from the perspective of different cultures, but again, the results offer no value as a means of comparison to this research.

Table 27; The Following Information Sources Offer Good Value, 1 Strongly Disagree, 5 Strongly Agree

	N	Mean	Std. Deviation
Online Only Travel Agents	343	3.94	.842
Owner or Company Representative	342	3.51	1.041
Local Tourist Board	340	3.27	.957
High Street Travel Agents Web Site	339	3.02	1.094
High Street Travel Agent	335	2.89	1.094

The discussion above presents the results of the analysis which shows how each information source is perceived on the four key characteristics; this discussion can be used to provide further evidence of the linkages between the perception of information sources, their overall perceived utility and their subsequent use in the destination decision making process. Table 28 below presents the results of the analysis in a single location in order to easily view the ranking position of each source on perceptions, utility and use. The table demonstrates a fair consistency between perceptions, utility and use, however, to test the relationships empirically, further analysis was conducted, the results of which are discussed below.

Table 28; Summary of Rankings on Utility Scores, Use and Perception Scores

	Utility	Use	Perceptions			
			Unbiased	Up to Date	Easy to Access	Value Provided
Independent traveller review site	1	1	1	2	1	NA
Online only travel agents	2	3	4	3	2	1
Friends and relatives	3	2	2	8	4	NA
Online travel guide	4	4	5	5	3	NA
Owner or company representative	5	5	9	1	7	2
Local tourism board	6	6	6	7	5	3
High street travel agents' web site	7	8	7	6	6	4
Printed travel guide	8	7	3	9	9	NA
High street travel agent	9	9	8	4	8	5

4.4.3 The Influence of Perceptions on the Use of Information Sources

Having presented the findings on the use of information sources as well as the perceptions that respondents had of their key characteristics, the results were explored in greater depth to establish which of the key characteristics of the information sources most influenced their adoption in the decision making process. Using the key characteristics as the predictor variables and the use of the information source as the dependent variable, logistic regression analysis was conducted to identify how well the predictor variables explain the outcome of the dependent variable (i.e. how well do perception scores predict whether an information source is used or not). This analysis also identified which of the key characteristics most influenced the likelihood of the source being adopted in the decision making process, thus demonstrating the perceived strengths and weaknesses of each source. The logistic regression analysis created Odds Ratios (Exp(B) Values) for each of the characteristics of the information sources. These odds ratios demonstrate the change in likelihood of an information source being used when the perception increases (or decreases) by one point on the five point Likert scale. For example, if one of the key characteristics of an information source was found to have an associated odds ratio of 1.5, an increase of one point for the mean perception score for that characteristic would result in the likelihood of the source being used increasing by 50%. Conversely, an odds ratio below 1 implies that as the perception score increases by 1 point, there is a decrease in the likelihood of the source being used; an odds ratio of 0.6 for example would mean a 40% reduction in the likelihood.

Each source was analysed individually to identify how much the perception of a key characteristic effects the probability of the source being adopted in the decision making process. This analysis is critical to develop the understanding of the relative strengths and weaknesses of each information source beyond simple mean perception scores as it demonstrates the influential force of the perceptions on the probability of information source being used. This negative result only occurred twice and the reduction in likelihood was very small.

1. **Direct Communication**

The results pertaining to direct communication (Table 29) found that the perceptions of bias, ease of access and value were all statistically significant predictors of the use of this information source. The strongest predictor this source being used or not was the value offered with an odds ratio of 2.08,

i.e. if a respondent increases their perception by one point on the five point scale used to measure the perceptions, the likelihood of them communicating directly with the owner or company representative would increase by 107.9%. The odds ratio for ease of access was 1.364 and for the perception of bias was 1.355. These ratios could now be explored in conjunction with the results from the information source usage and mean perception scores. When all of this information was looked at simultaneously, explanations for direct communication being in the middle of the table for information sources used emerged. Value is a strong predictor of the use of direct communication; the better the perception of value the higher the likelihood of this source being used. Direct communication was perceived to offer the best value for money of all information sources. This has been offset by the other characteristics that are linked to the use of this source as this source is seen to be the least unbiased and the third least easy to access. The respective odds ratios supply the statistical evidence to provide the explanation for direct communication with the owners or company representatives being used by only 42.05% of respondents. The perception of how up to date this information source was not found to be related to whether this sources was used or not.

Table 29; Model Summary for Direct Communication

Model Performance	X^2 (4, N = 335) = 76.944, p = <.001	
Nagelkerke R Square	.274	
Cases Correctly Classified	69.9%	
Odds Ratios	Sig.	Exp(B)
Unbiased	.010	1.355
Up to Date	.468	1.121
Easy to Access	.015	1.364
Offers Good Value	.000	2.079

2. **Local Tourism Board**

Only two of the key characteristics of the local tourist board as an information source were significant predictors of the likelihood of it being used; value offered and ease of access (Table 30). The LTB had a mean perceived value score of 3.27 out of 5, placing it third out of the five sources. Its odds ratio was 1.792, meaning for every point increase in the score for value, there would be an increase in the likelihood of this source being used of 79.2%. The LTB had a perceived ease of access score of 3.82 which again placed it in mid table on this characteristic. The odds ratio for ease of access was 1.399 In terms of use, so a one point increase in the perception score would increase the

likelihood of using that source by 39.9%. LTB was ranked sixth out of the nine sources in terms of use and the results imply that there are no extreme perceptions, either positive or negative about the LTB.

Table 30; Model Summary for Local Tourism Board

Model Performance	X^2 (4, N = 328) = 38.183, p = <.001	
Nagelkerke R Square	.147	
Cases Correctly Classified	66.2%	
Odds Ratios	Sig.	Exp(B)
Unbiased	.071	1.233
Up to Date	.442	.897
Easy to Access	.026	1.399
Offers Good Value	.000	1.792

3. High Street Travel Agents

The perceptions of bias, ease of access and value provided were all significant to the probability of high street travel agent (HSTA's) being used in the decision making process, but according to the results of the logistic regression analysis (Table 31), how up to date it is was not. Ease of access was the characteristic of the information source which was the strongest predictor of use with a one point increase on the perception scale making it 152.6% more likely to be used. As this represents a positive correlation, clearly HSTA's are 152.6% less likely to be used as the perception score falls by one point. A one point increase in the perception scores for bias and value also corresponds to an increase in the likelihood of use of 59.6% and 44.4% respectively. HSTA's were the second least easy to access information source, the second most biased and offered the worst value for money according to the respondents so it is no surprise that they were the least used information source, however, the logistic regression analysis provides statistical support to the claim that these factors explain why destination decision makers ignore HSTA's.

Table 31; Model Summary for High Street Travel Agents

Model Performance	X^2 (4, N =315) = 74.812, p = <.001	
Nagelkerke R Square	.324	
Cases Correctly Classified	77.8%	
Odds Ratios	Sig.	Exp(B)
Unbiased	.005	1.596
Up to Date	.872	1.033
Easy to Access	.000	2.526
Offers Good Value	.021	1.444

4. **High Street Travel Agent's Web Sites**

The level of bias, ease of access and value offered were all significant predictors of whether HSTAWS's were used or not (Table 32). Being seen easy to access was the strongest predictor of their use, with a one point increase in this perception score resulting in an 83.8% increase in the likelihood that the source would be used. HSTAWS's sit sixth out of the nine information sources in terms of its perceived ease of access meaning that if this was the only significant influence on their use, it would have the same position in the information source usage table (as no other influences are significant). However, this source was seen to be relatively biased and to offer relatively poor value for money and both of these characteristics were significant predictors with odds ratios of 1.35 and 1.60 respectively, resulting in HSTAWS's being the second least used information source. Full results of the logistic regression analysis can be seen in Table 32 below.

Table 32; Model Summary for High Street Travel Agents' Web Sites

Model Performance	X^2 (4, N =327) = 61.762, p = <.001	
Nagelkerke R Square	.243	
Cases Correctly Classified	74.0%	
Odds Ratios	Sig.	Exp(B)
Unbiased	.020	1.350
Up to Date	.122	1.300
Easy to Access	.001	1.838
Offers Good Value	.000	1.604

5. **Online Only Travel Agents**

OOTA's were seen by respondents to offer the best value of all sources, and the results of the logistic regression analysis (Table 33) identify this characteristic as the strongest predictor of use – as

the perception score increases by one point, the decision maker is 90.2% more likely to use this source. However, OOTA's were second in terms of ease of access and only fourth in terms of their perceived level of bias, both of which were significant influences on the source being used and resulting in OOTA's being the third most used information source.

Table 33; Model Summary for Online Only Travel Agents

Model Performance	X^2 (4, N =331) = 65.571, p = <.001	
Nagelkerke R Square	.249	
Cases Correctly Classified	73.1%	
Odds Ratios	Sig.	Exp(B)
Unbiased	.000	1.824
Up to Date	.606	1.086
Easy to Access	.034	1.465
Offers Good Value	.000	1.902

6. Printed Travel Guides

The results of the logistic regression analysis identified the level of bias and the ease of access as being the two significant influences on whether PTG's are used in the decision making process or not (Table 34). How easy they are to access was the most influential on the likelihood of PTG's being used or not as a one point increase on this score would result in an 84.8% increase in the likelihood of them being used. Once again, it must be remembered that as this is a positive correlation, a decrease in the perception score would result in a decrease in the likelihood of the source being used, and for PTG's, the perception score for this characteristic was low; 3.15 making them the least easy to access source. Compensating for the perception score for ease of access, was the perception score for bias; PTG's were seen to be the third least bias source with a score of 3.30. One point changes in the perception score for this characteristic only result in a 40.7% change in the likelihood of the source being used. The model therefore offers a strong explanation as to why PTG's sit third from bottom on the usage tables.

Table 34; Model Summary for Printed Travel Guides

Model Performance	X^2 (4, N =339) = 45.419, p = <.001	
Nagelkerke R Square	.174	
Cases Correctly Classified	67.6%	
Odds Ratios	Sig.	Exp(B)
Unbiased	.007	1.407
Up to Date	.160	1.208
Easy to Access	.000	1.848

7. Online Travel Guides

Being up to date and easy to access were the two characteristics of OTG's that were significant predictors of whether they were used in the destination decision making process (Table 35). Ease of access has the largest odds ratio of the two, with a one point increase in this score resulting in a 58.9% increase in the likelihood of the source being used. For the perceived level of bias, a point increase only results in a 17% increase in the likelihood of the source being used. OTG's were ranked third for ease of access (4.07), fifth for being unbiased (3.27) and had an overall usage ranking of fourth, being used by 51.6% of respondents.

Table 35; Model Summary for Online Travel Guides

Model Performance	X^2 (4, N =330) = 35.800, p = <.001	
Nagelkerke R Square	.139	
Cases Correctly Classified	67.6%	
Odds Ratios	Sig.	Exp(B)
Unbiased	.218	1.166
Up to Date	.000	1.772
Easy to Access	.004	1.589

8. **Independent Traveller Review Sites**

ITRS's were the most used source with 65.5% of respondents stating that they used this source in the destination decision making process (as was shown in Table 22). The characteristics that were significant predictors of use were its ease of access and how up to date it was seen to be (Table 36). For the former, a point increase in the perception score results in a 54.0% increase in the likelihood of the source being used and for the latter, the increase is 78.8%. The perception score for up to

date for ITRS's was 3.81 placing it second of all the sources, and the score for ease of access was 4.26, placing it first. The high perceptions scores and significant odds ratios clearly support the usage ranking score for ITRS's.

Table 36; Model Summary for Independent Traveller Review Sites

Model Performance	X^2 (4, N =340) = 39.340, p = <.001	
Nagelkerke R Square	.164	
Cases Correctly Classified	75.3%	
Odds Ratios	Sig.	Exp(B)
Unbiased	.104	1.227
Up to Date	.000	1.788
Easy to Access	.010	1.540

9. Friends and Relatives

Friends and relatives were the second most used information source after ITRS's with 64.8% of respondents stating that they used this source (see Table 22). The only significant predictor of use for this source was the ease of access which scored 4.02 on the perception score, placing it fourth out of the nine sources. The odds ratio for this predictor is 2.008 (see Table 37) meaning that a one point increase in the perception score would result in a 100.8% increase in the likelihood of the source being used. The perception score and the odds ratios are both relatively high, which can explain the high ranking of F&R in the source usage table.

Table 37; Model Summary for Friends and Relatives

Model Performance	X^2 (4, N =336) = 27.874, p = <.001	
Nagelkerke R Square	.116	
Cases Correctly Classified	75.9%	
Odds Ratios	Sig.	Exp(B)
Unbiased	.951	.993
Up to Date	.176	1.216
Easy to Access	.000	2.008

The results presented above provide empirically supported explanations for the ranking position for the nine information sources used in the destination decision making process.

This section has reviewed and evaluated information sources' perceived utility, whether they were used or not, how they are perceived on four key characteristics and the influence of these perceptions on the likelihood of the sources being used in the decision making process. To conclude the analysis of the results pertaining to the role of information sources in the decision making process, analysis was conducted to identify whether relationships existed between the use of specific information sources and whether destinations viewed through that source were selected or not.

4.4.4 Relationships between Information Source Used and Destination Outcome

Identifying any significant relationships between the information sources used by destination decision makers to research a destination and whether the destination was selected or not is valuable to the providers of information as well as to the businesses presented through the sources. In order to identify relationships, all destinations that were actively researched and either selected or rejected were analysed by the information sources that were used to research them. Logistic regression analysis was used to identify significant relationships between the independent variables (the information sources used to research the destination) and the dependent variable (whether the destination chosen).

The results, shown in Table 38, identified that seven of the nine information sources were significant predictors of whether a destination researched was chosen or not with only the use of HSTA's and OTG's not being significant predictors. Of particular interest within the results was the existence of odds ratios (Exp(B) values) of lower than 1.00 for some of the information sources indicating a negative correlation; where this exists, the use of those sources reduces the likelihood of the destination being chosen. The largest predictor of a destination being chosen was whether the destination decision maker had researched it through printed travel guides; if they did, they were 157.9% more likely to choose the destination. The second strongest predictor of whether a destination was chosen was Direct Communication (95.7% more likely if source used) followed by Friends and Relatives (50.1% more likely). After these three sources, the use of the remaining four (of the seven significant relationships established) resulted in the destination being less likely to be selected. If the destination decision maker used an OOTA, they were 56.9% less likely to choose the destination. HSTAWS's reduced the likelihood by 40.7% and the information found on ITRS's made destination decision makers 39.8% less likely to be chosen. Finally, when respondents contacted the

local tourist board for information about a particular destination, they were 34.4% less likely to choose the destination.

Table 38 Model Summary for Source Used and Destination Selection Outcome

Model Performance	X^2 (9, N =955) = 102.879, p <.001	
Nagelkerke R Square	.136	
Cases Correctly Classified	66.3%	
Odds Ratios	Sig.	Exp(B)
Direct Communication	.000	1.957
Local Tourist Board	.043	.656
High Street Travel Agent	.592	1.134
High Street Travel Agent's Web Site	.014	.593
Online Only Travel Agents	.000	.431
Printed Travel Guides	.000	2.579
Online Travel guides	.314	1.226
Independent Traveller Review Sites	.003	.602
Friends and Relatives	.026	1.506

These results challenge those of Stienmetz and Fesenmaier (2014) who claimed that advertising channels had no significant effect on destination choice. However, the data collection and analysis methods of these two pieces of research differed in a way which may explain the difference in results. Stienmetz and Fesenmaier (2014) asked respondents directly whether the advertising channels used in their research affected destination choice and the analysis was conducted based on those results. In this research the results were obtained from identifying which sources respondents used to research destinations as well as which destination was ultimately chosen (simultaneously identifying the destinations that were rejected); this method was used to maximise the reliability of responses in line with the post positivist research philosophy adopted in this research. The findings of this research relating to the influence of information sources on the destination decision making process are supported by research conducted by authors who focus on one or two sources; for example, Volo's (2010) research on ITRS's and Molina and Esteban's (2006) research on types of travel brochures and the respective content identified relationships between information sources and destination decision making.

Within this section of Chapter Four, the construct of the perceived utility of tourist information sources has been tested and found to hold validity. The results have furthermore identified a perceived utility score for each information source and have identified and presented the percentage of respondents who used each source in their decision making process. Statistically significant correlations were found to exist between the perceived utility score for each information source and the number of respondents who used each source, demonstrating that a relationship exists between the perceived utility of an information source and whether it is used or not. Next, the perceptions of the information sources were identified and each source was ranked based on its mean perception score for how unbiased, how up to date and easy to access it was seen to be as well as the value for money it was perceived to offer. After these were identified, analysis identified how much the perception of each characteristic impacted the likelihood of a source being used. Finally, the use of seven of the nine information sources were found to be a statistically significant predictor of the likelihood of a destination being selected or rejected during the destination decision making process, therefore hypothesis five is supported.

H5: The use of certain information sources to research destinations significantly affects the likelihood of the destination being either chosen or rejected.

This will have practical implications to tourist destination information providers. Where the use of a specific information source increases the likelihood of the destination being chosen, marketers must consider methods of encouraging engagement with this source in order to exploit its effectiveness. For information sources which decrease the likelihood of a destination being chose, the challenge is to identify the cause of the deterrent and identify possible amelioration measures.

4.5 Demographic Differences in Behaviour

The role of tourist information sources in the destination decision making process was further analysed to identify any significant differences between demographic segments. Differences in perceived utility of information sources, whether they were used or not and whether their use impacts the likelihood that a destination be selected or not will all be of interest to information providers and destination marketers.

4.5.1 Demographics and Perceived Utility Scores

First, to identify any differences in perceived utility of the information sources between the different demographics, ANOVA (analysis of variance) tests were conducted for each of the information sources and the demographic groupings. For example, the perceived utility of Direct Communication was tested against the age groupings of the respondents, followed by their levels of household income, then levels of education finally their travel party. After these tests were completed, the analysis moved on to test the perceived Utility of the Local Tourist Board against these demographics, then High Street Travel Agents and so on until all sources had been tested against all demographics to uncover any significant variances in the Perceived Utility that were accountable to demographic differences.

The analysis produced seven statistically significant differences in the perceived Utility of information sources that can be attributed to demographic differences (see Table 39). For Age Grouping demographics, the results showed that there was a significant difference between the 16 – 24 age group and the 35 – 44 age group when it came to the Perceived Utility of HSTAWS's; the former ascribing this source a higher utility score than the latter, thus considering it a more useful information source. To understand the size of the effect of this difference, ETA squared scores were calculated and Cohen's (1988) guidance was followed; .01 = small effect, .06 = moderate effect and .14 = large effect. We can see that the effect size for this first result was small, meaning that the difference between the age groups, while statistically significant, is small. There was a moderate effect size, however, for the difference between the perceived Utility of OOTA's for 16 – 24 year olds and 45 – 54 year olds. Of the remaining results, while the differenced in Perceived Utility have statistical significance, the effect size is small, which implies that the perception of the Utility of information sources by different demographic groups is not particularly volatile. This notwithstanding, when the difference in the Perceived Utility scores between the demographics are compared to the relative use of the information sources (Table 40), one can see that a positive correlation is evident between Perceived Utility and use does exist which implies that fluctuations in perceived utility between the demographics will affect behaviour. This can be seen in Table 40, which demonstrates that 16 – 24 year olds ascribe a Utility score of 3.40 to HSTAWS's and 44.6% of this group used that source. The 35 – 44 year old age group ascribed a Utility score of 3.11 to this source and only 14.3% of the group used it. The pattern is the same for all of the significant results

that came from the ANOVA tests; higher perceived utility scores result in increased use of the source amongst the different demographics.

Table 39; Significant Differences between the Perceived Utility of Information Sources and Demographics

Demographic		Mean Utility Score	Information Source	Significance Level	ETA Squared
Age Group	16 – 24	3.40	HSTAWS	F (4, 335) = 3.7, p = .006	.04
	35 – 44	3.11			
	16 – 24	3.40	OOTA	F (4, 340) = 5.1, p = .001	.06
	45 – 54	3.02			
Level of Income (000's)	< £12	3.85	OOTA	F (4, 339) = 3.7, p = .005	.04
	> £80	3.47			
	£24 - £39	3.90	OOTA	F (4, 339) = 3.7, p = .005	.04
	> £80	3.47			
	£40 - £80	3.87	OOTA	F (4, 339) = 3.7, p = .005	.04
	> £80	3.47			
	<£12	3.45	OTG	F (4, 338) = 4.4, p = .002	.05
	£24 - £39	3.81			
Travel Party	With Children	3.68	OOTA	F (4, 307) = 3.0, p = .019	.04
	Adult Group	3.97			

Table 40; Percieved Utility Score of Information Sources by Demographic and Use

Demographics with Significant Differences		Mean Utility Score	% of Demographic that used the Source	Information Source
Age Group	16 – 24	3.40	44.6%	HSTAWS
	35 – 44	3.11	14.3%	
	16 – 24	3.40	70.5%	OOTA
	45 – 54	3.02	57.1%	
Level of Income (000's)	< £12	3.85	65.5%	OOTA
	> £80	3.47	55.3%	
	£24 - £39	3.90	72.0%	OOTA
	> £80	3.47	55.3%	
	£40 - £80	3.87	63.7%	OOTA
	> £80	3.47	55.3%	
	<£12	3.45	65.5%	OTG
	£24 - £39	3.81	64.7%	
Travel Party	With Children	3.68	60.0%	OOTA
	Adult Group	3.97	68.1%	

4.5.2 Demographics and Use of Information Sources

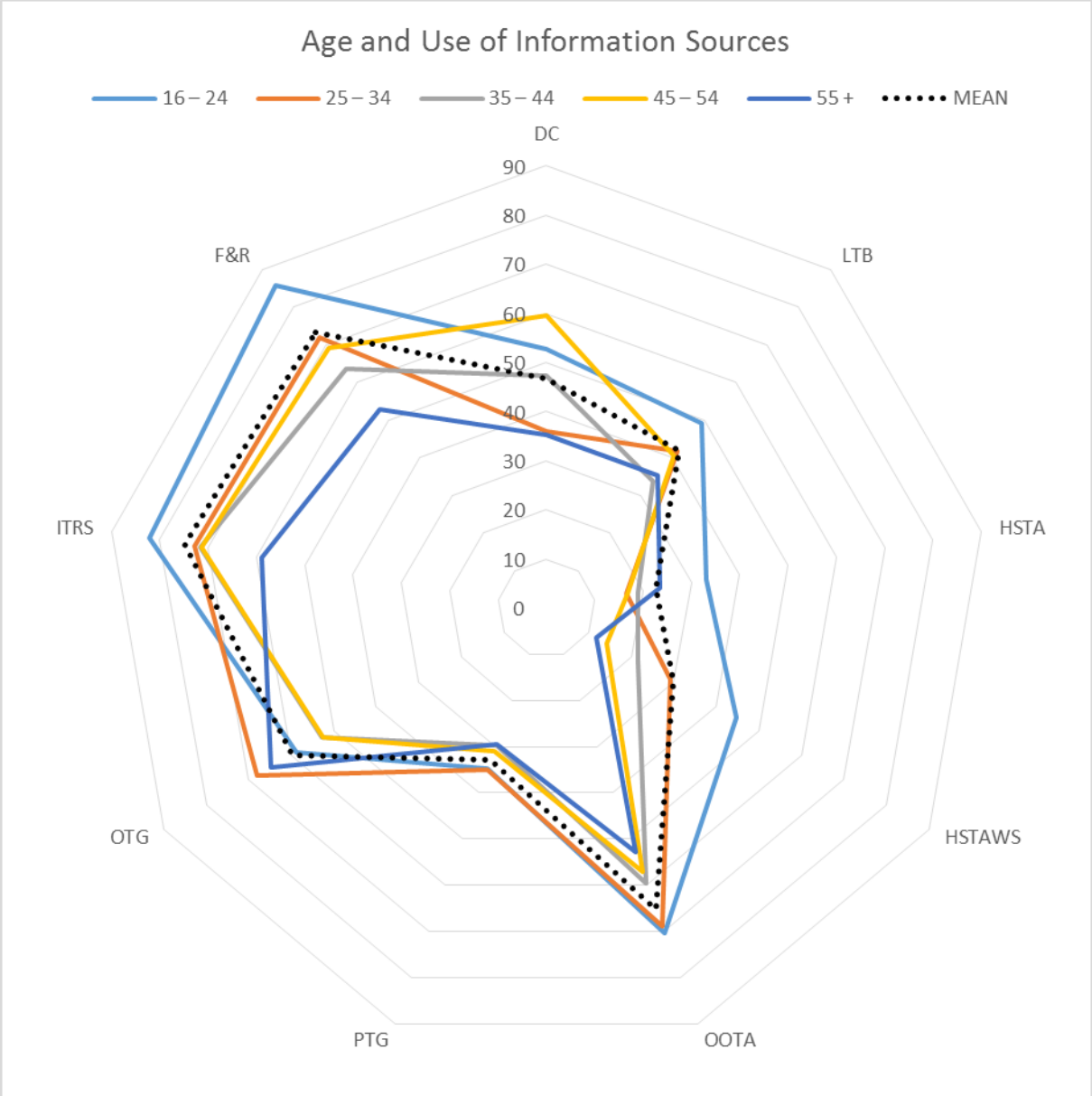
After identifying differences in perceived utility scores that were attributable to demographic differences, the data were next analysed to identify whether the use of each information source is affected by demographics. Table 41 shows the number within each demographic that used the information sources. The information has also been presented graphically in figures 12 – 16.

Table 41: Use of Information Sources by Demographic

	% Of Demographic that Used Information Source								
Demographic	DC	LTB	HSTA	HSTAWS	OOTA	PTG	OTG	ITRS	F&R
Age									
16 – 24	52.7	49.1	33.0	44.6	70.5	34.8	58.9	82.1	85.7
25 – 34	35.9	41.7	16.5	29.1	68.9	35.0	68.0	72.8	71.8
35 – 44	47.3	33.8	18.9	21.6	59.5	29.7	52.7	71.6	63.5
45 – 54	59.5	40.5	16.7	14.3	57.1	31.0	52.4	71.4	69.0
55 +	35.3	35.3	23.5	11.8	52.9	29.4	64.7	58.8	52.9
MEAN	46.6	42.0	22.7	29.9	65.2	33.0	59.8	74.7	73.3
Gender									
Male	45.3	41.0	24.5	27.3	66.2	31.7	61.2	77.7	74.8
Female	47.1	42.9	21.4	31.4	64.3	34.8	59.5	73.3	72.9
MEAN	46.4	42.1	22.6	29.8	65.0	33.5	60.2	75.1	73.6
Level of Education									
High School	37.5	18.8	25.0	12.5	43.8	6.3	31.3	56.3	56.3
Undergraduate	47.9	43.2	26.6	37.3	69.5	35.5	60.4	78.7	74.0
Postgraduate	41.9	42.7	18.5	25.8	65.3	33.1	61.3	75.0	78.2
Professional	59.5	40.5	16.7	16.7	61.9	35.7	64.3	69.0	61.9
MEAN	46.7	41.6	22.5	29.6	65.0	33.3	59.8	75.2	73.2
Household Income (£000's)									
<12	44.8	44.8	22.4	29.3	65.5	31.0	58.6	74.1	86.2
12 – 23.9	52.9	51.8	32.9	38.8	64.7	41.2	64.7	74.1	77.6
24 – 39.9	42.7	37.3	25.3	37.3	72.0	32.0	65.3	76.0	80.0
40 – 80	41.8	38.5	14.3	24.2	63.7	29.7	59.3	78.0	58.2
> 80	55.3	34.2	10.5	10.5	55.3	28.9	44.7	71.1	71.1
MEAN	46.7	42.1	22.2	30.0	65.1	33.1	60.2	75.2	73.8
Travel Party									
On Own	58.6	62.1	34.5	34.5	69.0	51.7	79.3	79.3	69.0
Partner Only	36.1	40.3	18.5	31.1	65.5	37.8	63.9	76.5	70.6
With Children	61.4	42.9	27.1	30.0	60.0	30.0	57.1	74.3	71.4
Adult Group	41.5	39.4	19.1	29.8	68.1	26.6	61.7	75.5	81.9
MEAN	45.9	42.4	22.3	30.6	65.6	34.1	63.1	76.1	73.9

With regards to age, it can be seen from Figure 12 that the younger demographic uses a wide range of information sources; the percentage of 16 – 24 year olds who used each information source is above the mean with the exception of PTG's. Web based resources such as ITRS's, OTG's and OOTA's are amongst the most used sources for this demographic. F&R's and ITRS's are the most frequently used sources. When analysing the perceptions of these individual information sources for this demographic (see Appendix 5), it can be seen that F&R's and ITRS's are seen to be the most unbiased of the information only sources (i.e. booking not possible through source), while the other prominent source, OOTA's is seen to offer the best value for money. The implication is that this age group are averse to what they perceive to be commercial sources; they demand independent

Figure 12: Age and Use of Information Sources



opinions and often seek these opinions from web based sources. 25 – 34 year olds also tend to prefer non-commercial sources including F&R, ITRS's and OTG's; these sources score highly for ease of access in particular (Appendix 5); score above average in terms of being unbiased but relatively poorly compared to other sources when it comes to being up to date. This indicates that easy to access sources are more important for this demographic than being up to date. 25 – 34 year olds usage of DC and HSTA's are both well below the mean score for the overall sample; both of these sources score very poorly for the perceived level of (un)bias. 35 – 44 year olds use less information sources with only DC fractionally over the overall mean for usage of that information source; analysis of the perceptions of the characteristics of the information sources by this demographic show that DC is perceived to have by far the most up to date information, indicating that this is a priority for this age group. This demographic tends to rely more on OOTA's (seen to offer best value for money and be second most up to date source) and ITRS's (third most up to date source). These sources can provide information on both structural and situational inhibitors and does not access a wide range of sources. While the 45 - 54 year old demographic is also generally below the overall mean for all information sources, respondents in this category demonstrated a range of sources being used rather than a focus. This demographic were again more inclined towards non-commercial information sources with the exception being DC; for this source 45 - 54 year olds were the most frequent users. The data in Appendix 5 shows that this demographic views DC positively on all four characteristics (with the level of bias being least positively perceived) which implies that marketers targeting this demographic would benefit from ensuring that DC is as convenient as possible. The 45 – 54 year old demographic viewed HSTA's and HSTAWS's as the least unbiased and the worst value for money of all demographics. The 55+ demographic used the least information sources overall and demonstrated an inclination towards commercial, personal sources such as the LTB and HSTA's, i.e. traditional sources. This age group did, however, demonstrate an above average use of OTG's. OOTA's were seen to be very easy to access by this demographic; however, when looking at the perceptions of the individual characteristics of LTB's and HSTA's, deducing the reason for their relative popularity compared to other sources is challenging. When this demographic were asked about the individual characteristics of HSTA's in particular, the results suggest that they perceive HSTAWS's more favourably, but the use of this source is lower than traditional, bricks and mortar HSTA's. It may be speculated that this is a symptom of routine.

Chi squared tests were conducted to identify differences in the use of information sources amongst the age groups that are statistically significant (full results can be seen in Table 44); the results

showed that for DC, HSTA's, HSTAWS's and F&R's, the differences were significant (see Table 44). Luo *et al* (2004) found no significant differences between age groups and information source usage, and Moisescu (2013) only found a significant, positive correlation between age and the use of travel agents. Linear relationships such as this are not important, however, what is important is understanding where significant relationships exist between different demographic segments and the use of the information sources. Marketers can use this information to guide the allocation of resources to specific information outlets in accordance to the results. The findings of this research are supported by that of Ip *et al* (2012) who also identified a significant relationship between age and the use of one specific information source; the internet. The youngest demographic, in this research, used three of the four exclusively web based information sources (HSTAWS's, OOTA's and ITRS's) more than any other demographic and this research also found that the declining use of the HSTAWS's as age increases was statistically significant.

Table 42: Ip *et al*'s (2012) demographic influences on internet use during travel planning

Demographic	**% that used the internet in travel planning**
Age Group	
25 years and younger	54.6
26 – 35 years	62.6
36 – 45 years	43.0
46 – 55 years	27.2
56 – 65 years	13.2
66 years or older	3.5

Source: Ip et al (2012, p. 422)

Figure 13 demonstrates difference in information source use between the genders and clearly it can be seen that there is little difference. The two charts which present the perceptions of the individual characteristics of each source (Appendix 6) also demonstrate only minor differences between genders. Furthermore, chi square tests conducted on the results found no significant differences in information source use by males and females. This is in contrast to the findings of Luo *et al* (2004) whose results revealed differences between the genders in their research on destination decision makers' use of the internet in travel planning. The findings of this research however, were more consistent with those of Ip *et al* (2012) whose research identified no significant differences between the genders. These results may be consolidated somewhat by the findings of Kim *et al* in 2007 who identified that women were (at that time) more frequent users of the internet but men had (at the

time) more experience of using that medium which implies that the use of this prominent information source by males and females has equalised.

Figure 13: Gender and Use of Information Sources

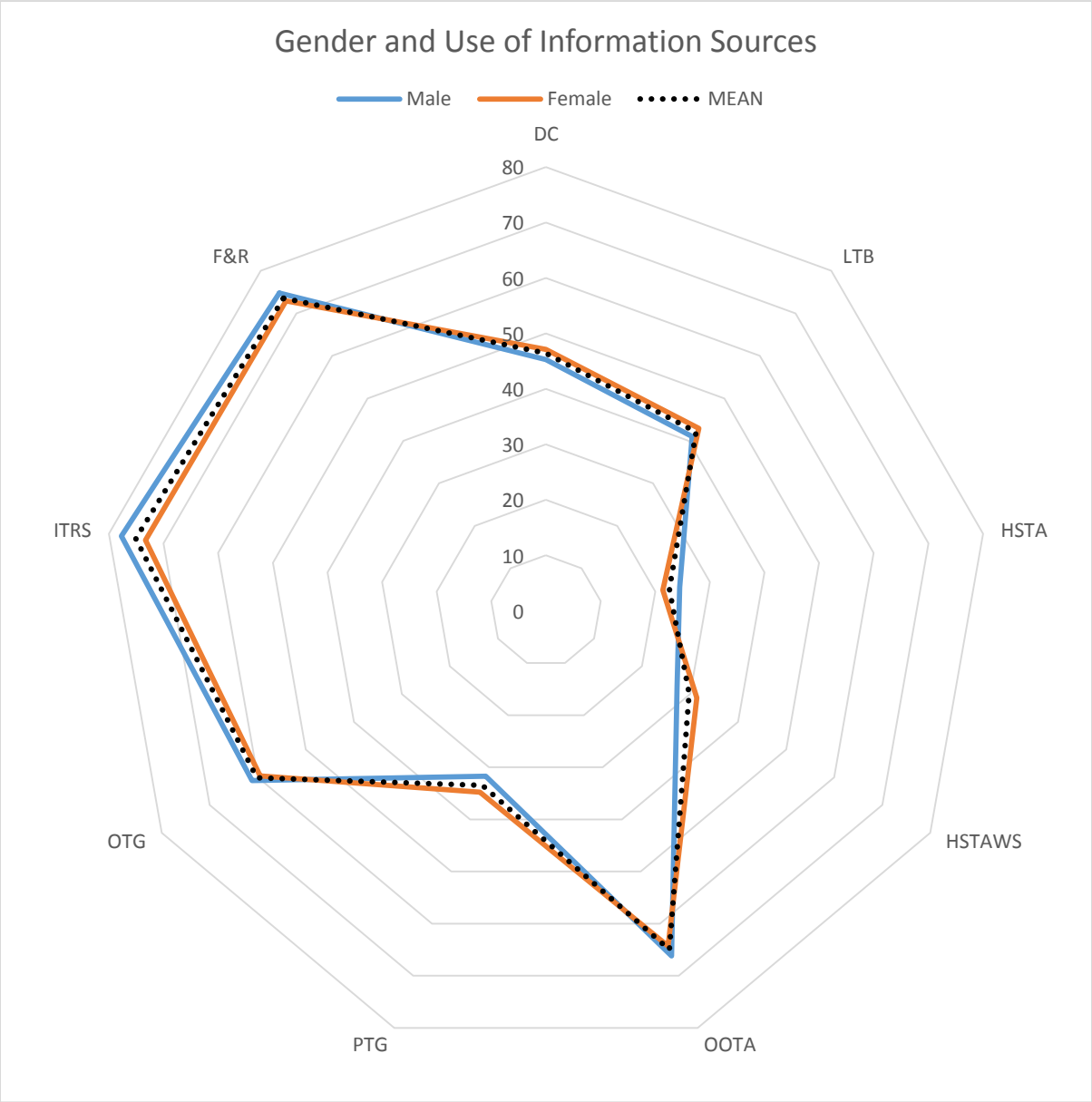


Figure 14, which represents levels of education and information source usage, shows a limited range of information sources being used by respondents with a high school level education. The percentage of respondents who used each source was well below the mean score for the overall sample with the exception of HSTA's; analysis shows that this demographic perceived HSTA's to be easier to access than all other demographics. In their information search, Undergraduates demonstrated a wide source portfolio and while preferring non-commercial sources such as F&R's and ITRS's which were perceived by this demographic to be the two least biased sources as well as

two of the easiest to access. This group were relatively more inclined to include information from travel agents (both HSTA's and HSTAWS's), possibly due to the fact that they perceived these sources to be the least biased of all demographics which again, alludes to the importance of this characteristic to this demographic. Postgraduates demonstrated a stronger inclination towards non-commercial sources with preferences for F&R's, ITRS's and OTG's which, according to the results of analysis presented in Appendix 7, were seen to be three of the four least biased sources (the fourth being PTG's which this demographic perceived to be the least up to date). For postgraduates, DC and HSTA's were relatively unused sources compared to other education demographics and the results presented in Appendix 7 show that they perceive these source to be relatively difficult to access. Respondents with professional qualifications demonstrated a use of a range of sources; personal/commercial such as DC as well as non-personal/non-commercial such as ITRS's and OTG's. The one type of information source that this demographic did not demonstrate an inclination towards was commercial/non-personal, i.e. HSTAWS's which they perceived to be more biased and more difficult to access than other demographics.

The Chi Squared test for this demographic identified that the differences in the use of HSTAWS's were statistically significant; undergraduates used this source the most, followed by postgraduates, then respondents with professional qualifications and finally respondents whose highest level of education was high school. While the pattern of the results may differ from those of Ip *et al* (see Table 43) the significance of differences between levels of education is supported. Moisescu (2013) also found a significant relationship between level of education and the use of travel agents; the higher the level of education, the higher the use of travel agents. If HSTAWS's and HSTA's were combined as one source within this research, the results would reflect those of Moisescu (2013). This finding is also supported by those of Jacobsen and Munar (2012) who also found a negative correlation between the level of education and use of travel agent's web sites.

Figure 14: Level of Education and Use of Information Sources

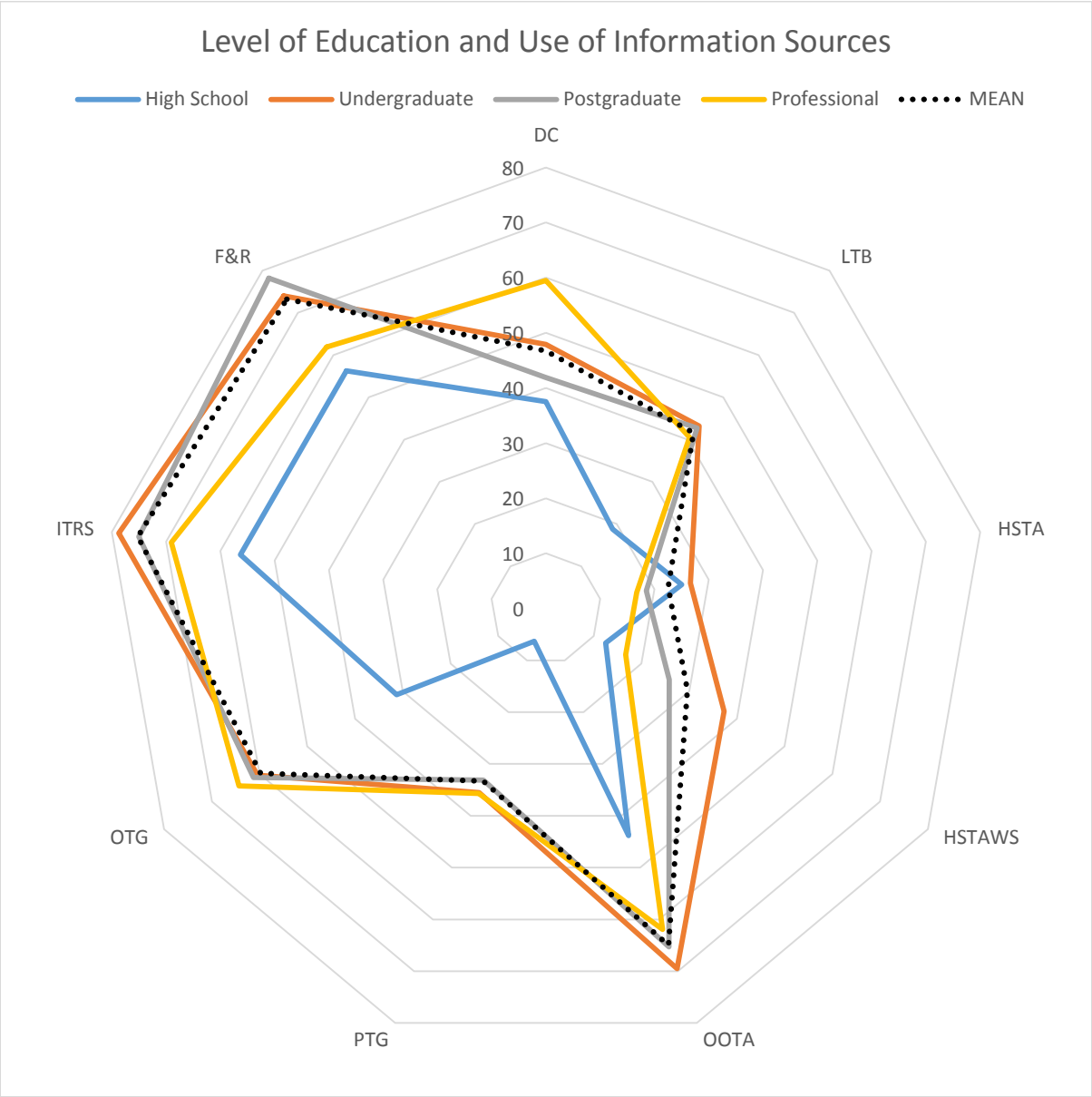


Table 43: Ip *et al*'s (2012) Demographic influences on internet use during travel planning

Education	
Less than secondary/high school	4.3
Completed secondary/high school	28.0
(Attended) some college/university	52.9
Completed college/university	59.3
Completed postgraduate degree	68.8

Source: Ip et al (2012, p. 422)

Figure 15 shows similar information source patterns for all levels of income, but varying levels of information source usage. The demographic segment earning £40,000 - £80,000 uses relatively few information sources and are most likely to look for information from ITRS's and OOTA's. Analysis of the perceived characteristics of this information source by this demographic (Appendix 8) reveal that ITR's are seen to be both the easiest to access as well as the least biased of all information sources. HSTA's and DC were seen to be the most difficult to access as well as the least unbiased, which is reflected in their low adoption by this demographic. The lowest income group, <£12,000 generally fits the mean score with the exception of a relatively high reliance on F&R's who are seen to be up to date and easy to access (Appendix 8). Those earning £12,000 - £23,999 tend to show an above average use of personal commercial sources such as LTB's, HSTA's and HSTAWS's but like most income groups, have an overall preference for non-commercial sources (F&R's and ITRS's). Once again, these sources are perceived to be relatively easy to access and up to date. While these sources are the most frequently used by this demographic, respondents earning £12,000 - £23,999 were more inclined to using commercial sources (DC, HSTA, HSTAWS's and LTB) than other demographics; analysis of the perceptions of this source show that this demographic considers these sources to be more up to date and easier to access than other demographics. Those with a household income of £24,000 - £39,999 again showed similar information source usage patterns to the average, and showed a relatively high inclination towards HSTAWS's. Respondents earning above £80,000 used the least number of sources, and while their most frequently used sources were F&R's, ITRS's and OOTG's, this group used DC more than any other because it perceived the source to be easier to access than any other demographic did.

The chi squared tests conducted on these results showed that the differences in the use of HSTA's, HSTAWS's and F&R's was significantly different. Respondents with lower income levels were more reliant on F&R's; a finding supported by Moisescu (2013) and Luo *et al* (2004). Ip *et al* (2012) also found income levels to be significant to the choice of information sources, specifically online sources. As with this research, Ip *et al* (2012) did not present a correlation between income and use of the internet, but their findings do show that middle income groups tend to be the highest users of the internet in travel planning which was also reflected in the results of this research.

Figure 15: Household Income and Use of Information Sources

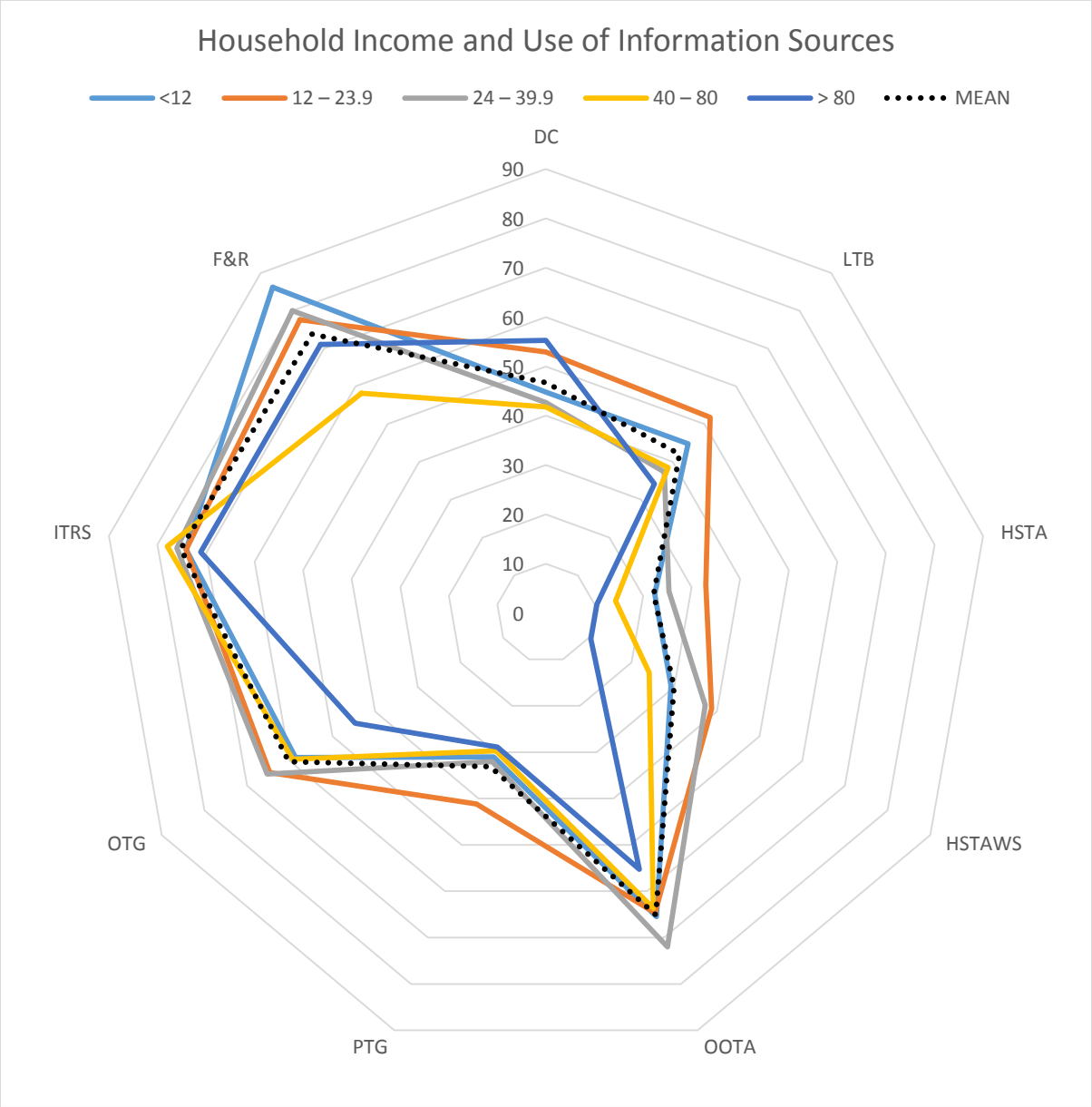


Figure 16 shows that people travelling on their own are more likely to access a range of non-commercial, non-personal sources such as ITRS's, OTG's and OOTA's. The reasons for this are not obviously apparent from analysis of the perceptions of the individual characteristics as no source appears dramatically better then another. However, When looking at the level of bias ascribed to personal/commercial sources, DC, LTB, HSTA's and HSTAWS's score particularly badly indicating a lack of trust in the type of source which may explain why they are used less than other sources. This notwithstanding, this demographic is still more inclined to include DC, LTB, HSTA's and HSTAWS's in their overall search process and they demonstrate a widely inclusive search strategy. Those travelling with their partner only did not differ greatly in source usage to those travelling with children or in an adult group; one exception being that there was a higher percentage of those

travelling in an adult only group to communicate with F&R's. This is logical as it is likely that they were communicating with members of their travel group during the trip planning process. DC was also used more by people travelling with children than people travelling with their partner or in an adult group and analysis shows that this demographic perceived DC to be more up to date and better value for money than those travelling with their partner or in an adult group. Chi squared tests found that the differences in the use of DC was significant for travel parties, with groups with children were most frequent users of DC, followed by those travelling on their own. This suggests that for marketers targeting these demographics, making this DC as convenient to access as possible would be a worthwhile investment. Previous research by Fodness and Murray (1999) also found that those travelling with children would be more inclined towards using external, decisive sources supplemented by an above average use of contributory sources. Luo *et al* (2005) also found 'destination sources' (such as local accommodation providers) to be used more for travel parties including children than when people were travelling on their own or in an adult group. It may be put forward that DC is required when travelling with children due to specific requirements such as cots and fridges and kettles for food storage and preparation.

Figure 16: Travel Party and Use of Information Sources

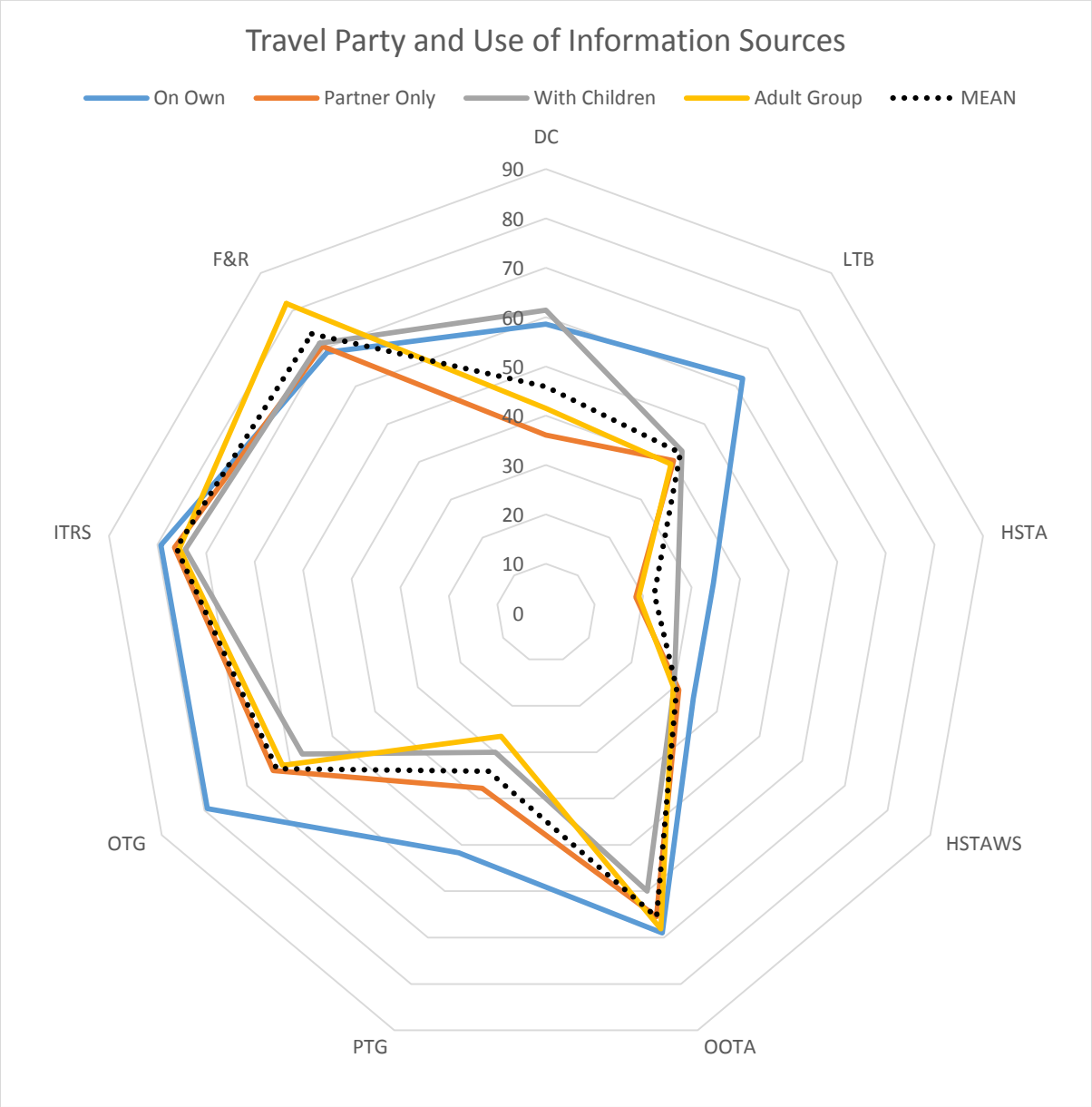


Table 44: Significant relationships between demographic variances and use of information sources.

Age	16 - 24	25- 34	35 – 44	45 - 54	55 +	Chi Square Results
% Using DC	52.7%	35.9%	47.3%	59.5%	35.3%	X^2 (4, 348) = 10.090, p = .039, phi = .170
Perceived Utility Score	3.42	3.36	3.37	3.46	3.30	
% Using HSTA	33.0%	16.5%	18.9%	16.7%	23.5%	X^2 (4, 348) = 4.731, p = .032, phi = .174
Perceived Utility Score	3.19	3.02	2.91	2.99	3.25	
% Using HSTAWS's	44.6%	29.1%	21.6%	14.3%	11.8%	X^2 (4, 348) = 21.622, p < .005, phi = .125
Perceived Utility Score	3.40	3.27	3.11	3.02	3.47	
% Using F&R	85.7%	71.8%	63.5%	69.0%	52.9%	X^2 (4, 348) = 16.531, p = .002, phi = .218
Perceived Utility Score	3.73	3.59	3.58	3.76	3.58	

Household Income (000's)	< £12	£12 - £23.9	£24 - £39.9	£40 - £80	> £80	
% Using HSTA	22.4%	32.9%	25.3%	14.3%	10.5%	X^2 (4, 347) = 12.408, p = .015, phi = .189
Perceived Utility Score	3.07	3.19	3.18	2.90	2.79	
% Using HSTAWS's	29.3%	38.8%	37.3%	24.2%	10.5%	X^2 (4, 347) = 13.424, p = .009, phi = .197
Perceived Utility Score	3.24	3.32	3.46	3.18	2.89	
% Using F&R	86.2%	77.6%	80.0%	58.2%	71.1%	X^2 (4, 347) = 18.288, p = .001, phi = .230
Perceived Utility Score	3.70	3.69	3.67	3.61	3.63	

Travel Party	On Own	Partner Only	With Children	Adult Group	Other	
% Using DC	58.6%	36.1%	61.4%	41.5%	100%	X^2 (4, 314) = 16.353 p = .003, phi = .228
Perceived Utility Score	3.44	3.32	3.45	3.33		

Level of Education	High School	Undergraduate	Postgraduate	Professional		
% Using HSTAWS's	12.5%	37.3%	25.8%	16.7%		X^2 (3, 351) = 11.247 p = .010, phi = .179
Perceived Utility Score	3.06	3.31	3.24	3.10		

4.5.3 Demographics, Use of Information Sources and Destination Selection

The final analysis conducted to understand variances in the role of information sources brought about by demographic differences was to look at the relationship between the use of an information source to research a destination and the likelihood of the destination then being accepted. This is a stage of analysis which is again parallel to the analysis conducted for the overall results which found significant relationships between the use of certain sources and the selection/deselection of destinations; this section will now compare the overall results with the results found for each demographic group.

Table 45 below presents the results of the logistic regression analysis which identifies which information sources are significant predictors of whether a destination was selected or not. The analysis was conducted for each demographic against each information source to see which information source increases or decreases the likelihood of the destination being chosen. The number of tests conducted and models created was extensive, but only the significant results are presented in the table. One can see at the top of Table 45 that for 16 – 24 year olds, logistic regression analysis produced one significant model to identify predictors of behaviour – the model for OOTA's. On the right hand side of the table the column titled 'Overall Exp(B) Value' demonstrates the Odds Ratios for the overall sample, i.e. the relationship between the use of the information source and the likelihood that the destination researched through that source is then chosen for all demographics. The column titled 'Exp(B) Values' demonstrates the Odds Ratios for the specific demographic and the column titled 'Change' shows the difference between the specific demographic and the overall sample in percentages. Values lower than 1 represent a decrease in the likelihood while values above 1 represent an increase in the likelihood.

Table 45; Demographic Differences in Information Source use and Liklihood of Destination Selection

Demographic		Info Source	Model Statistics	Exp(B) Value	Overall Exp(B) Value	Change
Age	16 – 24	OOTA	X^2 (9, N = 241) = 25.86, p = .002	.411	.431	-2%
	25 – 34	DC	X^2 (9, N = 223) = 36.97, p > .001	2.451	1.957	+49%
		HSTAWS		.339	.593	-25%
		OOTA		.332	.431	-10%
		F&R		2.395	1.506	+89%
	35 – 44	OTG	X^2 (9, N = 163) = 24.63, p = .003	10.799	1.226	+957%
		ITRS		.382	.602	-22%
	45 – 54	OOTA	X^2 (9, N = 84) = 22.30, p = .008	.149	.431	-28%
	55 +		Model not significant.			
Gender	Male	LTB	X^2 (9, N = 316) = 27.33, p = .001	.472	.656	-18%
	Female	DC	X^2 (9, N = 430) = 63.35, p > .001	2.389	1.957	+43%
		HSTAWS		.384	.593	-21%
		OOTA		.397	.431	-3%
		PTG		2.977	2.579	+40%
		ITRS		.480	.602	-12%
		F&R		1.821	1.506	+32%
Education	High School		Model not significant.			
	Undergraduate	LTB	X^2 (9, N = 369) = 45.46, p > .001	.438	.656	-22%
		HSTAWS		.483	.593	-11%
		OOTA		.404	.431	-3%
		F&R		2.697	1.506	+119%
	Postgraduate	DC	X^2 (9, N = 268) = 43.71, p > .001	2.870	1.957	+91%
		HSTAWS		.251	.593	-34%
		OOTA		.386	.431	-5%
	Professional		Model not significant.			
Income (000's)	< £12	F&R	X^2 (9, N = 241) = 30.37, p > .001	6.784	1.506	528%
	£12 - £23.9	HSTA	X^2 (9, N = 196) = 24.48, p = .004	3.759	1.134	263%
		HSTAWS		.309	.593	-28%
		OOTA		.389	.431	- 4%
	£24 - £39.9	DC	X^2 (9, N = 150) = 16.92, p = .050	4.190	1.506	+268%
	£40 - £80	DC	X^2 (9, N = 213) = 31.54, p > .001	2.392	1.506	+89%
		ITRS		.368	.602	-23%
	> £80		Model not significant.			
Travel Party	On Own		Model not significant.			
	Partner Only	DC	X^2 (9, N =255) = 41.70, p > .001	4.258	1.506	+275%
		HSTAWS		.444	.593	-15%
		OOTA		.350	.431	-8%
		PTG		3.594	2.579	+102%
	With Children		Model not significant.			
	Adult Group	OOTA	X^2 (9, N =192) = 31.83, p > .001	.289	.431	-14%
		PTG		4.401	2.579	+182%
		F&R		2.646	1.506	+114%

16 – 24 year olds who use an OOTA to research their destination are less likely to choose that destination by a factor of .411 (58.9% less likely) which is similar to the odds ratio of .431 (56.9% less likely) for the overall sample of the survey. The use of other information sources were not significant predictors on the decision to select or reject a destination for this age group.

For the 25 – 34 year old demographic, four information sources were found to be significant predictors of behaviour; DC, HSTAWS, OOTA and F&R. This age group is 89% more likely to select a destination that they heard about from friends and relatives than the overall sample and 49% more likely compared to the overall sample if they found information via direct communication. However, the 25 – 34 year old age group is 25% less likely to choose a destination they researched through HSTAWS's compared to the overall sample and 10% less likely than the overall sample if they found information on OOTA's. The results for 35 – 44 year olds show a dramatic increase in the likelihood of a destination being chosen when researched using OTG's; a 957% increase. However, when this age group find information from ITRS's they are 22% less likely than the overall sample to choose the destination. Finally, the analysis produced one more significant model in respect to the age demographic; the 45 – 54 age group were 28% less likely than the overall sample to choose a destination that they researched through OOTA's.

In terms of gender, males only differed from the overall sample in that they would be even less likely to select a destination if they had researched it through the LTB. Females, however would be 43% more likely to select the destination if they communicated directly with the owner or company representative; they would also be 40% and 32% more likely if they had obtained information from PTG's and F&R's respectively. The results indicate that HSTAWS's (-21%), ITRS's (-12%) and, to a marginal extent, OOTA's (3%) have the effect of reducing the likelihood of destination choice when compared to the overall sample.

Undergraduates were found to be 119% more likely that then overall sample to select a destination that had been discussed with them by friends and relatives. However, the results showed that they were less likely to select a destination that they researched through the LTB by 22%, and through HSTAWS's by 11% compared to the overall sample. Postgraduates were found to be 91% more likely to choose a destination that they found information about directly from the owner or representative, but 34% less likely if they searched for information on HSTAWS's.

Respondents on an income of less than £12,000 are 528% more likely to select destination that they discussed with friends and relatives compared to the overall sample, but no other information sources for this income category returned significant predictive models. F&R's represent an inexpensive and convenient information source which may explain this result. Respondents in the £24,000 - £39,999 income group are 263% more likely, compared to the overall sample, to choose a destination that they were informed about via a HSTA, but 28% less likely when using the travel agent's web site. The demographic earning £40,000 - £80,000 were 89% more likely to choose a destination if they had communicated directly with the owner or company representatives, but 23% less likely than the overall sample to select a destination if they researched it via ITRS's.

The final demographic, travel party, produced significant models for the partner only and adult group categories. For partner only travel, DC and PTG's increased the likelihood of a destination being selected by 275% and 102% respectively when compared to the overall sample. HSTAWS's and OOTG's decreased the likelihood by 15% and 8% respectively. Adult groups were 182% more likely to select a destination if they read about it in a PTG and 114% more if they discussed the destination with F&R's. OOTA's reduced the likelihood for this demographic by 14% compared to the overall sample.

The results of the analysis conducted to explore demographic influences on the role of information sources demonstrate that these influences are significant and can support hypothesis six.

H6: Demographic differences affect the role of information sources in the destination decision making process.

Table 46; A comparison of demographic specifics and the overall sample on the likelihood of a destination being chosen after being researched through information sources.

	Information Source	Change in Likelihood
Age		
16 – 24	OOTA	-2%
25 – 34	DC	+49%
	HSTAWS	-25%
	OOTA	-10%
	F&R	+89%
35 - 44	OTG	+957%
	ITRS	-22%
45 – 54	OOTA	-28%
Gender		
Male	LTB	-18%
Female	DC	+43%
	HSTAWS	-21%
	OOTA	-3%
	PTG	+40%
	ITRS	-12%
	F&R	+32%
Education		
Undergraduate	LTB	-22%
	HSTAWS	-11%
	OOTA	-3%
	F&R	+119%
Postgraduate	DC	+91%
	HSTAWS	-34%
	OOTA	-5%
Income (000's)		
< £12	F&R	528%
£12 - £23.9	HSTAWS	263%
	OOTA	-28%
	PTG	- 4%
£24 - £39.9	DC	+268%
£40 - £80	DC	+89%
	ITRS	-23%
Travel Party		
Partner Only	DC	+275%
	HSTAWS	-15%
	OOTA	-8%
	PTG	+102%
Adult Group	OOTA	-14%
	PTG	+182%
	F&R	+114%

Chapter 5 – Conclusions and Recommendations

5.0 Overview of Chapter

This chapter will identify the min conclusions and recommendations from the research, tying in the hypothesis that were formulated and critically analysing the extent to which they were supported. The recommendations are aimed at industry practitioners as well as researchers who may wish to develop the understanding further.

5.1 Conclusions:

1. The Composite Choice Set Model, proposed in this research, does represent the mechanics of the destination decision making process. This finding is supported by the work of Crompton (1992) and Decrop (2010) whose research also concluded that choice set models may be used to accurately reflect the overall dynamics of destination choice. This is also supported by the empirical evidence produced from the results of this research in which every destination was found to belong to a specific set and that no sets were superfluous. The model created, tested and validated in this research synthesises the findings of other research into one complete, concise and contemporary model; the implication of this is that future research on tourist destination decision making can use this model as a macro perspective of the decision making process upon which to research elements of the process in more detail.

2. Each individual choice set within the Composite Choice Set Model represents the possible decision outcome for destinations; the veracity of the sets is supported by the empirical findings of this research. The sets included in the Composite Choice Set Model are also informed by those proposed by Crompton (1992), Prentice (2006) and Decrop (2010), however, they are a unique combination of mutually exclusive sets that represent all possible reasons for the deselection of destinations. As a result of the findings that verify the validity of each set, further research can be conducted to develop the understanding of the ontology of each set; for example, research may be conducted to identify the size of the evoked set or to analyse destinations in the inept of unavailable sets for common characteristics.

3. The results from this research show that the decision to include a specific information source in the destination decision making process or not is positively correlated to its perceived utility. Due to the lack of research on the construct of perceived utility of information sources, this is an original finding. Although Molina and Esteban (2006) researched the utility of different types of travel brochure (and found significant results between utility and use), their research did not define utility. Furthermore, there is no existing previous research which has created a construct for perceived utility of tourist information sources and confirmed its validity as a construct through statistical analysis. This finding makes a contribution to the research agenda on tourist information sources and implies that information providers must develop their understanding of the perceived utility of the information sources that they have available to them as communication channels. The perceived utility framework can be applied to the specific segment that is the target of the information provider in order to improve their understanding of the impact of different information sources.

4. This research also established that perceived utility is a function of a sources' perceived accessibility, bias, value for money and currency. Previous research had identified the centrality of these characteristics to the usefulness of information sources; Lam and McKercher (2013), Molina and Esteban (2006), Shi (2006), Frais et al (2008), Vaesna *et al* (2013), Ayeh et al (2013), Kim *et al* (2011) and Tan and Chen (2011) all identified one or more of these characteristics as being vital to the perceived usefulness of an information source, but this research is the first to combine them within a construct, confirm the validity of the construct through statistical analysis and to apply perceived utility to the use of information sources. The findings prove that the four key characteristics of the information sources influence whether a destination decision maker engages with an information source or not. The findings also reveal the perceived weaknesses of each information source which gives information providers the opportunity to address the weaknesses and increase the likelihood of the source they are communicating through being used.

5. The use of specific information sources to research destinations affects the likelihood of the destination being either chosen or rejected[22]. No previous research has identified this relationship through statistical analysis for the information sources included in this research.

[22] **T**he use of seven of the nine information sources were found to be a statistically significant predictor of the likelihood of a destination being selected or rejected during the destination decision making process.

Jacobsen and Munar's (2012) study on the use of different types of information source used in holiday planning uncovered similar patterns to those found in this research, but the statistical analysis was limited to identifying the frequency of respondents who said the source was important to their decision; this research applied logistical regression analysis to identify significant relationships between the use of an information source to research a destination and that destinations' likelihood of then being selected or deselected. These results demonstrate the importance of information providers being fully cognizant with the impact that choosing information sources through which to communicate has on the final destination decision.

6. Results of the analysis showed that the perceived utility of tourist information sources does vary amongst different demographics. This research presents the significant findings of the differences in perceived utility amongst different demographics. Again, as the construct of perceived utility of tourist information sources is original, it is not possible to demonstrate how this knowledge has developed from existing research. As a positive correlation between the use of an information source and its perceived utility has been established in this research, demographic differences in the perception of an information source will be correlated with its use. The conclusion below expands on this.

7. Demographic differences significantly affect the use of tourist destination information sources. These differences are consistent with the perceived utility construct in that as the perceived utility of a tourist information source increases from one demographic to another, the results showed a corresponding increase in the use of that source. Although other authors have found similar results in research on information source use amongst the demographics[23], this research is the first to establish a link between the perceived utility of the information source and its subsequent use. The implication of this is most relevant to individuals and organisations within tourist destinations who are involved in marketing their destination. Assuming that these people have a clear knowledge of their target market, they can develop marketing strategies based on the understanding of these research findings.

8. Demographic differences significantly affect the likelihood of a destination being selected when research through different information sources. 35 – 44 year old's for example are

[23] Moisescu (2013) found differences in information source use between different age groups, Ip *et al* (2012) between different genders, Jacobsen and Munar (2012) between different levels of education and Luo *et al* (2004) between different levels of income.

nearly 10 times more likely to choose a destination that they research through online travel guides than the overall population average. The implications of this are that information providers targeting different segments must consider the information source as well as the content provided on that source in order to maximise the likelihood of being chosen. It also opens up an opportunity for further research into the reasons for these demographic differences.

5.2 Recommendations

1. The Composite Choice Set model can be used in future research on destination decision making as a stable structure upon which to investigate individual facets of the overall process. Researchers could, for example, conduct deeper research into the specific heuristics that are applied at the early consideration stage in order to further develop the understanding of the information that is used to select/deselect destinations from active information search. The aim of this recommendation is to improve the consistency of research on destination decision making allowing for an improved ability to compare research findings and identify gaps in research.

2. Local tourism authorities should develop an understanding of why their destination is ruled out prior to active information search. This research has established that destinations are ruled out through the application of heuristic strategies and are either perceived to be unavailable, inept or not as good as alternative destinations. Identifying destination decision makers who considered but did not actively research a destination may be challenging, but could be achieved, for example, through the distribution of questionnaires on airlines flying to rival destinations. This would have a cost implication and the response rate may be low, however, identifying why a destination is eliminated would allow marketers to communicate information which specifically targets the perceived weaknesses of the destination.

3. Information providers must develop an understanding of the perceived utility of the sources they adopt to communicate with destination decision makers. They should identify how their target market perceive each information source overall, as well as reviewing the perception of the individual facets of the sources' utility (up to date, bias, accessibility and value) to identify weaknesses that may be ameliorated. In doing this, the information providers will be more likely to create cogent communications that will increase the likelihood of achieving the objectives of the communication. There would be implications in terms of the time and money required to develop this knowledge, however, it is unlikely that this research would need to be repeated very often.

4. Information providers should use the information sources that increase the likelihood of their destination being accepted. The aim of this recommendation is to exploit this relationship fully in order to increase the likelihood that their destination is chosen. There may be costs associated with ameliorating some of the characteristics of the information sources that are perceived badly by destination decision makers, however, improving the information distribution strategy may also be able to create cost savings through a better use of marketing budgets.

    a. As printed travel guides were found to have the biggest positive impact on a destination being chosen but were found to be one of the least accessible sources, the challenge for information providers would be to increase the accessibility of these sources of tourist information. This could be achieved by, for example, increasing the presence of PTG's in public libraries or by creating a simple brochure request system on information sources that are more accessible such as ITRS's or OOTA's.
    b. Communication with owners or company representatives was also found to increase the likelihood of the destination being chosen, however, these information providers must address the perceived lack of accessibility and the perceived level of bias that destination decision makers have.

5. Information providers should also address the information sources that reduce the likelihood of a destination being chosen. This recommendation would have resource requirements as these information sources must be monitored, amelioration measures must be communicated and the cost of ameliorating the complaint or bad review may also be a factor. However, the benefits of this action should be reduction in the likelihood that the destination is ruled out when research through the information source.
    a. ITRS's were found to reduce the likelihood of a destination being chosen by 39.8%; the inability for marketers to control content and the subsequent presence of negative information may be partly responsible for this. Marketers must therefore monitor these information sources and respond accordingly to negative information in order to be seen to ameliorate the problem.

6. Further research should be conducted on how cultural differences affect the role of information sources during the destination decision making process. While this research did address demographic differences, there was insufficient representation from different

cultures within the sample to allow for statistically significant findings to emerge. To ensure that the findings maintained their validity, the results pertaining to sources used by different cultures were not presented, however, further research may address this gap.

Appendix 1 – Summary of Information Sources Included in Selected Research

Bieger, T. and Laesser, C.	2004	Friends and relatives Destination information brochures Regional information brochures Other Hotel listings Travel guidebooks and travel magazines Tour operator brochures **Internet** Provided by retailer/agency Provided by tourist information at destination Ads in newspapers and magazines Provided by rail service/station agent Provided by NTB in Switzerland TV broadcasts Tradeshow Radio broadcasts Video, CD-Rom, DVD Videotext
Chen, J. and Gursoy, D.	2000	Airlines Corporate travel department PC Friends & relatives In flight info systems National government tourist office Newspapers/magazines State/city travel office Tour company Travel agency Travel guides TV/radio
Dey, B. and Sarma, M.	2010	Friends/relatives/colleagues Other tourists Travel agent/tour operator/travel guides Government tourism office Brochures/pamphlets Tourism information centre Advertisements Newspapers/magazine articles TV/radio Books Internet Airline Clubs/associations
Fodness, D. and Murray, B.	1997	Brochures Guide books Local tourism offices State travel guides Magazines Newspapers Auto clubs Travel agents Friends/relatives Highway welcome centres

Hyde, K.	2007	Travel guidebooks Friends & relatives Travel agents Travel brochures TV & movies Internet
Kim, D., Hwang, Y. and Fesenmaier, D.	2005	TV Magazine Newspaper Internet Radio
Lo, A., Cheung, C. and Law, R.	2002	Travel agency/tour company Airlines Corporate travel department (includes value for leisure travelers) Internet Hotels Friends or relatives Travel guide books Newspapers/magazines Tourism office/tourist association TV or radio travel programme
Lee, J., Soutar, G. and Daly, T.	2007	Internet travel sites Travel agents – online Online newsletters/email updates (permission marketing) Airlines – online Friends or relatives who lived there Friends or relatives who visited there Travel agents Tour operators Airlines – phone Travel books or guides Tourism office brochures Newspaper/magazine articles & travel sections Specialist travel magazines TV travel programmes

Appendix 2 – Questionnaire used for Data Collection

This questionnaire has been designed to find out the way in which people select or reject holiday destinations and the information sources that they use to help them decide. The information you provide will be completely anonymous and used only for the purpose of my PhD research. The questionnaire will take about 15 minutes to complete.

1. **Have you booked a holiday within the last 6 months and if so, what was the city or resort? (If not, please go to question 16.)**

2. **What is/was the purpose of the trip? Please tick all that apply:**

Leisure ☐

Business ☐

Education ☐

Visiting friends or relatives ☐

3. **Have you visited that resort or city previously?**

Yes / No (If yes, when did you visit?) Month……Year……..

4. **Did you need to find any information (e.g. prices and availability) before you booked?**

Yes / No

5. **Did you book your transport and accommodation as a package or separately? Please circle:**

Package / Separately

6. **How long was the vacation? Please circle:**

1 to 4 nights 5 to 8 nights 9 to 12 nights 13 to 16 nights Over 16 nights

7. Please state how much you agree with the following statements by circling the most appropriate option on the scale.

I chose this resort or city because…	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
…I have been there before	1	2	3	4	5
…it was recommended by a friend/family	1	2	3	4	5
…of a specific attraction that only exists there (e.g. natural, cultural, social)	1	2	3	4	5
…there were several similar places, but this was the best value overall	1	2	3	4	5
…there were several similar places, but this was the only one that was realistically possible	1	2	3	4	5
…I couldn't find the information I needed about other cities/resorts (e.g. about transport, accommodation or attractions)	1	2	3	4	5
…the information about this resort/city was more trustworthy than that of the other options	1	2	3	4	5

8. Which of the following did you book accommodation and transport to the resort or city through? Please tick.	**Transport**	**Accommodation**
Direct communication with owner or the official sales department (e.g. by phone, email or their web site)		
Local tourism board's web site		
High street travel agent		
High street travel agent's web site		
Online only travel agent/price comparison site (e.g. Expedia, Laterooms etc.)		

	9. Apart from the resort or city you chose, which other resorts or cities did you actively look through information about? (You do not need to fill all 7 boxes)
Resort or City	1
	2
	3
	4
	5
	6
	7

10. a) When you were looking for information about the destinations you were considering, did that search guide you to a resort or city that you had not considered before you began actively searching?
Yes / No
10. b) If you answered yes to 10 a), which resorts or cities were you guided to?
10. c) If you answered yes to 10 a), were you previously aware of this resort or city?
Yes / No

11. For the resorts or cities identified in question 9, which information source(s) did you use to find information? (Please tick <u>all</u> that apply.)	Resort or City						
	1	2	3	4	5	6	7
Direct communication by phone or email (e.g. local tourism board, airline, hotel, tour operator, attraction)							
Local tourism board's web site							
High street travel agent (in shop)							
High street travel agent's web site							
Online only travel agent/price comparison site (e.g. Expedia, Laterooms etc.)							
Printed travel guides (e.g. Lonely Planet, Fodor)							
Travel guides online							
Independent traveller review sites and forums (e.g. Tripadvisor, WikiTravel etc.)							
Friends and relatives							

12. Please select your reason for not choosing the resorts or cities listed in question 11. (Tick <u>all</u> that apply.)	Resort or City						
	1	2	3	4	5	6	7
Realistically, this was impossible (e.g. sold out, too expensive, inaccessible)							
Below acceptable standards (e.g. accommodation, transport, attractions)							
Possible and acceptable, but not as good or good value as resort/city chosen							

	13. Apart from the resorts or cities identified in question 9, which other resorts/cities crossed your mind but you did not look for information about?
Resort or city	1
	2
	3
	4
	5
	6
	7
	8

14. For the resorts/cities identified in question 13, do you remember hearing about them through the following media? (Please tick any that apply.)		Resort or City							
		1	2	3	4	5	6	7	8
Broadcast media (TV, film, radio)									
Printed Media (newspapers, magazines, travel brochures and billboards)									
Friends and relatives									
Other (please state)	…… …… …… ……								

15. From the following list, please state why you excluded the resorts or cities identified in question 13 from further information search; (Please tick all that apply)	Resort or City							
	1	2	3	4	5	6	7	8
Something about it puts me off (e.g. accommodation quality, distance, number/type of attractions)								
I already know that it's not a realistic option								
I don't know enough about the place to motivate me to look for more information								
I know more good things about the other places on my short list								

16. Please state how much you agree with the following statement by circling the most appropriate option on the scale.

I consider the following information source to be TRUSTWORTHY:	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
Direct communication by phone or email (e.g. local tourism board, airline, hotel, tour operator, attraction)	1	2	3	4	5
Local tourism board's web site	1	2	3	4	5
High street travel agent (in shop)	1	2	3	4	5
High street travel agent's web site	1	2	3	4	5
Online only travel agent/price comparison site (e.g. Expedia, Laterooms etc.)	1	2	3	4	5
Printed travel guides (e.g. Lonely Planet, Fodor)	1	2	3	4	5
Travel guides online	1	2	3	4	5
Independent traveller review sites and forums (Tripadvisor, Wikitravel etc.)	1	2	3	4	5
Friends and relatives	1	2	3	4	5

17. Please state how much you agree with the following statement by circling the most appropriate option on the scale.

I consider the information from the following source to be ACCURATE:	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
Direct communication by phone or email (e.g. local tourism board, airline, hotel, tour operator, attraction)	1	2	3	4	5
Local tourism board's web site	1	2	3	4	5
High street travel agent (in shop)	1	2	3	4	5
High street travel agent's web site	1	2	3	4	5
Online only travel agent/price comparison site (e.g. Expedia, Laterooms etc.)	1	2	3	4	5
Printed travel guides (e.g. Lonely Planet, Fodor)	1	2	3	4	5
Travel guides online	1	2	3	4	5
Independent traveller review sites and forums (Tripadvisor, Wikitravel etc.)	1	2	3	4	5
Friends and relatives	1	2	3	4	5

18. Please state how much you agree with the following statement by circling the most appropriate option on the scale.

I consider the information from the following source to be EASY TO ACCESS:	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
Direct communication by phone or email (e.g. local tourism board, airline, hotel, tour operator, attraction)	1	2	3	4	5
Local tourist board's web site internet	1	2	3	4	5
High street travel agent	1	2	3	4	5
High street travel agent's web site	1	2	3	4	5
Online only travel agent/price comparison site (e.g. Expedia, Laterooms etc.)	1	2	3	4	5
Travel guides (books)	1	2	3	4	5
Travel guides online	1	2	3	4	5
Independent traveller review sites and forums (Tripadvisor, Wikitravel etc.)	1	2	3	4	5
Friends and relatives	1	2	3	4	5

19. Please state how much you agree with the following statement by circling the most appropriate option on the scale.

The following information sources STRONGLY INFLUENCED my choice:	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
Direct communication by phone or email (e.g. local tourism board, airline, hotel, tour operator, attraction)	1	2	3	4	5
Local tourist board's web site internet	1	2	3	4	5
High street travel agent	1	2	3	4	5
High street travel agent's web site	1	2	3	4	5
Online only travel agent/price comparison site (e.g. Expedia, Laterooms etc.)	1	2	3	4	5
Travel guides (books)	1	2	3	4	5
Travel guides online	1	2	3	4	5
Independent traveller review sites and forums (Tripadvisor, Wikitravel etc.)	1	2	3	4	5
Friends and relatives	1	2	3	4	5

20. Please state how much you agree with the following statement by circling the most appropriate option on the scale.

I consider the following information source to offer GOOD VALUE:	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
Direct communication by phone or email (e.g. local tourism board, airline, hotel, tour operator, attraction)	1	2	3	4	5
Local tourism board's web site	1	2	3	4	5
High street travel agent	1	2	3	4	5
High street travel agent's web site	1	2	3	4	5
Online only travel agent/price comparison site (e.g. Expedia, Laterooms etc.)	1	2	3	4	5

21. **Please state how much you agree with the following statement by circling the most appropriate option on the scale.**

When booking a holiday, I am very concerned about:	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
Financial risk, e.g. fraud, paying too much, paying cancellation fees etc.	1	2	3	4	5
Performance risk, e.g. accommodation not as good as expected, resort/city disappointing	1	2	3	4	5
Physical risk, e.g. safety and security	1	2	3	4	5

Please state your:

Age		**Gender**		**Nationality**	

Highest level of education (please circle)	Secondary School	College	University Undergraduate	University Postgraduate

Household income (please circle)	Up to £11,999	£12,000 – £23,999	£24,000 – £39,999	£40,000 – £80,000	> £80,000

From the following list, please circle the option which best describes your travel party for the vacation identified in question 2.

On my own	With partner only	With partner and children	Adult only Group	Other (please describe)

Appendix 3 – Questionnaire First Draft

22.If you were asked to name all of the destinations or places that you could visit in the world, how many do you think you could name? Please circle;

1 - 20 21 - 50 51 - 100 100 +

23.Have you booked a VACATION to a resort/city within the last 6 months and if so, where? What if they haven't?

24.What is/was the main purpose of the trip? Please tick;

Leisure ☐

Business ☐

Education ☐

Visiting friends or relatives ☐

25.Have you visited that resort/city previously?

Yes / No (If yes, when did you visit?)

Month…….Year……..

26.Did you need to find any information (e.g. prices and availability) before you booked?

Yes/No

27.Did you book it as a package or did you book individual elements (e.g. flights and accommodation) separately?

Package / Separately

28.How long was the vacation? Please circle;

< 7 Days 7 – 10 Days > 10 Days

8. Please state how much you agree or disagree with the following statements on a 1 to 5 scale (*by circling the most appropriate option on each scale).*

1 being completely disagree and 5 being completely agree.

I chose this resort/city because:	**Strongly Disagree**	**Disagree**	**Neither**	**Agree**	**Strongly Agree**
I have been there before	1	2	3	4	5

I have been there before	1	2	3	4	5
It was recommended by a friend/family	1	2	3	4	5
There is (was) a specific attraction I want(ed) to visit (e.g. natural, cultural, social)	1	2	3	4	5
There were several similar places, but this was the best value overall	1	2	3	4	5
There were several similar places, but this was the only one that was realistically possible	1	2	3	4	5
This was the only resort/city that has (had) what I want and that I could find information about (e.g. flight & accommodation)	1	2	3	4	5
The information about this resort/city was more trustworthy than that of the other options	1	2	3	4	5

9. Which of the following did you book transport and accommodation through? Please tick.	**Transport**	**Accommodation**
Direct communication with owner or the official sales department		
Local tourism boards' web site		
High street travel agent		
High street travel agents' web site		
Online only travel agent (Expedia/Opodo etc.)		

	10. Apart from the resort/city you chose, which other resorts/cities did you actively look through information about?
Destination	1
	2
	3
	4
	5

11. For the resorts/cities identified in question 10, which information source(s) did you use to find information? (Please tick <u>all</u> that apply.)	1	2	3	4	5
Direct communication by phone or email (e.g. local tourism board, airline, hotel, tour operator, attraction)					
Local tourism boards' web site					
High street travel agent (in shop)					
High street travel agents' web site					
Online only travel agent (e.g. Expedia/Opodo)					
Printed travel guides (e.g. Lonely Planet, Fodor)					
Travel guides online					
Independent traveller review sites and forums (e.g. Tripadvisor, WikiTravel etc.)					

12. For the resorts/cities identified in question 10, please tick <u>all</u> that apply.	1	2	3	4	5
Not acceptable (e.g. transport or accommodation options were not suitable)					
Not possible (e.g. sold out, too expensive, inaccessible)					
Possible and acceptable, but not as good as resort/city chosen					

	13. Apart from the resorts/cities identified in 10, which other resorts/cities crossed your mind but you did not look for information about?
Destination	1
	2
	3
	4
	5
	6
	7
	8

14. For the resorts/cities identified in question 13, from where do you remember hearing about them? (Please tick all that apply.)	Destination							
	1	2	3	4	5	6	7	8
Broadcast media (TV, film, radio)								
Printed Media (newspapers, magazines, travel brochures and billboards)								
Friends and relatives								
Other (Please state)……								

15. From the following list, please state why you excluded the destinations from further information search; (Please tick all that apply)	Destination							
	1	2	3	4	5	6	7	8
There's something about it that puts me off (e.g. standard of accommodation, distance)								
I already know that it is not a realistic option								
I don't know enough about the place to motivate me to look for more information								
I know more good things about the other places on my short list								

16. How trustworthy do you think the information provided by the following sources are on a scale of 1 – 5 (1 being completely untrustworthy and 5 being completely trustworthy)?

Direct communication by phone or email (e.g. local tourism board, airline, hotel, tour operator, attraction)	1	2	3	4	5	6
Local tourism boards' web site	1	2	3	4	5	6
High street travel agent	1	2	3	4	5	6
High street travel agents' web site	1	2	3	4	5	6
Online only travel agent (Expedia/Opodo etc.)	1	2	3	4	5	6
Travel guides (books)	1	2	3	4	5	6
Travel guides online	1	2	3	4	5	6
Independent traveller review sites and forums (Tripadvisor, Wikitravel etc.)	1	2	3	4	5	6

17. How accurate would you say the information provided by the following sources is on a scale of 1 – 5 (1 being completely inaccurate and 5 being completely accurate)?

Direct communication by phone or email (e.g. local tourism board, airline, hotel, tour operator, attraction)	1	2	3	4	5	6
Local tourism boards' web site	1	2	3	4	5	6
High street travel agent	1	2	3	4	5	6
High street travel agents' web site	1	2	3	4	5	6
Online only travel agent (Expedia/Opodo etc.)	1	2	3	4	5	6
Travel guides (books)	1	2	3	4	5	6
Travel guides online	1	2	3	4	5	6
Independent traveller review sites and forums (Tripadvisor, Wikitravel etc.)	1	2	3	4	5	6

18. How influential was each of the following sources on your choice of resort/city from 1 – 5 (1 being no influence at all and 5 being extremely influential)?

Direct communication (DMO, airline, hotel, tour operator, attraction)	1	2	3	4	5	6
DMO internet	1	2	3	4	5	6
High street travel agent	1	2	3	4	5	6
High street travel agents' web site	1	2	3	4	5	6
Online only travel agent (Expedia/Opodo etc.)	1	2	3	4	5	6
Travel guides (books)	1	2	3	4	5	6
Travel guides online	1	2	3	4	5	6
Independent traveller review sites and forums (Tripadvisor, Wikitravel etc.)	1	2	3	4	5	6

	19. From the list below, please rank which do you think provides the best value when it comes to booking, 1 being best value and 5 being worst.
	Direct communication with owner or the official sales department
	Local tourism boards' web site
	High street travel agent
	High street travel agents' web site
	Online only travel agent (Expedia/Opodo etc.)

20. On a 1 to 5 scale, to what extent do you attempt to avoid the following risks associated with travel purchases? 1 being 'I don't mind taking a risk with this' and 5 being 'I don't stop looking for information until I am 100% satisfied that I am avoiding this risk'.					
Financial risk, e.g. fraud, paying too much, paying cancellation fees etc.	1	2	3	4	5
Performance risk, e.g. accommodation not as good as expected, resort/city disappointing	1	2	3	4	5
Physical risk, e.g. poor safety records, threats of terrorism, kidnapping	1	2	3	4	5

Please state your:					
Age		**Gender**		**Nationality**	

Highest level of education (please circle)	High School	Undergraduate	Postgraduate	Doctoral

Household income (please circle)	Up to £11,999	£12,000 – £23,999	£24,000 – £39,999	£40,000 – £80,000	> £80,000

Appendix 4a – Correlation Matrix for Direct Communication

Correlations

		Information provided by owners or company representatives is unbiased	Information provided by owners or company representatives is up to date	Information provided by owners or company representatives is easy to access	Information provided by owners or company representatives is good value	When booking a holiday I am very concerned about financial risk.	When booking a holiday I am very concerned about performance risk.	When booking a holiday I am very concerned about physical risk.
Information provided by owners or company representatives is unbiased	Pearson Correlation	1	.166**	.223**	.237**	.086	.068	.132*
	Sig. (2-tailed)		.002	.000	.000	.109	.210	.014
	N	347	345	342	338	345	345	344
Information provided by owners or company representatives is up to date	Pearson Correlation	.166**	1	.291**	.357**	.094	.116*	.052
	Sig. (2-tailed)	.002		.000	.000	.081	.031	.336
	N	345	348	344	340	346	346	345
Information provided by owners or company representatives is easy to access	Pearson Correlation	.223**	.291**	1	.396**	-.001	.046	.013
	Sig. (2-tailed)	.000	.000		.000	.985	.398	.814
	N	342	344	346	340	346	345	345
Information provided by owners or company representatives is good value	Pearson Correlation	.237**	.357**	.396**	1	.098	.052	.071
	Sig. (2-tailed)	.000	.000	.000		.070	.336	.191
	N	338	340	340	342	342	341	341
When booking a holiday I am very concerned about financial risk.	Pearson Correlation	.086	.094	-.001	.098	1	.537**	.493**
	Sig. (2-tailed)	.109	.081	.985	.070		.000	.000
	N	345	346	346	342	351	350	349
When booking a holiday I am very concerned about performance risk.	Pearson Correlation	.068	.116*	.046	.052	.537**	1	.504**
	Sig. (2-tailed)	.210	.031	.398	.336	.000		.000
	N	345	346	345	341	350	351	348
When booking a holiday I am very concerned about physical risk.	Pearson Correlation	.132*	.052	.013	.071	.493**	.504**	1
	Sig. (2-tailed)	.014	.336	.814	.191	.000	.000	
	N	344	345	345	341	349	348	349

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Appendix 4b – Correlation Matrix for High Street Travel Agent

Correlations

		The information provided by HSTAs is unbiased.	The information provided by HSTAs is up to date.	The information provided by HSTAs is easy to access.	The information provided by HSTAs is good value.	When booking a holiday I am very concerned about financial risk.	When booking a holiday I am very concerned about performance risk.	When booking a holiday I am very concerned about physical risk.
The information provided by high street travel agents is unbiased.	Pearson Correlation	1	.251**	.219**	.315**	.058	.010	.130*
	Sig. (2-tailed)		.000	.000	.000	.291	.858	.017
	N	339	333	332	326	337	338	336
The information provided by high street travel agents is up to date.	Pearson Correlation	.251**	1	.337**	.348**	.068	.122*	.108*
	Sig. (2-tailed)	.000		.000	.000	.211	.025	.046
	N	333	340	334	327	338	339	338
The information provided by high street travel agents is easy to access.	Pearson Correlation	.219**	.337**	1	.314**	.076	.073	.158**
	Sig. (2-tailed)	.000	.000		.000	.161	.181	.004
	N	332	334	340	328	339	340	338
The information provided by high street travel agents is good value.	Pearson Correlation	.315**	.348**	.314**	1	.085	.014	.174**
	Sig. (2-tailed)	.000	.000	.000		.122	.800	.001
	N	326	327	328	335	334	335	333
When booking a holiday I am very concerned about financial risk.	Pearson Correlation	.058	.068	.076	.085	1	.537**	.493**
	Sig. (2-tailed)	.291	.211	.161	.122		.000	.000
	N	337	338	339	334	351	350	349
When booking a holiday I am very concerned about performance risk.	Pearson Correlation	.010	.122*	.073	.014	.537**	1	.504**
	Sig. (2-tailed)	.858	.025	.181	.800	.000		.000
	N	338	339	340	335	350	351	348
When booking a holiday I am very concerned about physical risk.	Pearson Correlation	.130*	.108*	.158**	.174**	.493**	.504**	1
	Sig. (2-tailed)	.017	.046	.004	.001	.000	.000	
	N	336	338	338	333	349	348	349

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Appendix 4c – Correlation Matrix for High Street Travel Agents' Web Sites

Correlations

		The information provided by high street travel agents web site is unbiased.	The information provided by high street travel agents web site is up to date.	The information provided by high street travel agents web site is easy to access.	The information provided by high street travel agents web site is good value.	When booking a holiday I am very concerned about financial risk.	When booking a holiday I am very concerned about performance risk.	When booking a holiday I am very concerned about physical risk.
The information provided by high street travel agents web site is unbiased.	Pearson Correlation	1	.273**	.183**	.323**	.051	.057	.197**
	Sig. (2-tailed)		.000	.001	.000	.346	.293	.000
	N	341	338	337	332	339	340	338
The information provided by high street travel agents web site is up to date.	Pearson Correlation	.273**	1	.375**	.263**	.023	.094	.087
	Sig. (2-tailed)	.000		.000	.000	.675	.081	.109
	N	338	343	339	334	341	342	340
The information provided by high street travel agents web site is easy to access.	Pearson Correlation	.183**	.375**	1	.289**	-.002	.131*	.079
	Sig. (2-tailed)	.001	.000		.000	.968	.015	.145
	N	337	339	343	336	343	343	342
The information provided by high street travel agents web site is good value.	Pearson Correlation	.323**	.263**	.289**	1	.033	.060	.116*
	Sig. (2-tailed)	.000	.000	.000		.545	.269	.033
	N	332	334	336	339	338	339	337
When booking a holiday I am very concerned about financial risk.	Pearson Correlation	.051	.023	-.002	.033	1	.537**	.493**
	Sig. (2-tailed)	.346	.675	.968	.545		.000	.000
	N	339	341	343	338	351	350	349
When booking a holiday I am very concerned about performance risk.	Pearson Correlation	.057	.094	.131*	.060	.537**	1	.504**
	Sig. (2-tailed)	.293	.081	.015	.269	.000		.000
	N	340	342	343	339	350	351	348
When booking a holiday I am very concerned about physical risk.	Pearson Correlation	.197**	.087	.079	.116*	.493**	.504**	1
	Sig. (2-tailed)	.000	.109	.145	.033	.000	.000	
	N	338	340	342	337	349	348	349

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Appendix 4d – Correlation Matrix for Price Comparison Site

Correlations

		The information provided by price comparison sites is unbiased.	The information provided by price comparison sites is up to date.	The information provided by price comparison sites is easy to access.	The information provided by price comparison sites is good value.	When booking a holiday I am very concerned about financial risk.	When booking a holiday I am very concerned about performance risk.	When booking a holiday I am very concerned about physical risk.
The information provided by price comparison sites is unbiased.	Pearson Correlation	1	.285**	.153**	.193**	.143**	.059	.076
	Sig. (2-tailed)		.000	.005	.000	.008	.277	.160
	N	347	343	343	338	346	345	344
The information provided by price comparison sites is up to date.	Pearson Correlation	.285**	1	.348**	.396**	-.008	.020	.023
	Sig. (2-tailed)	.000		.000	.000	.879	.707	.671
	N	343	348	344	338	346	346	344
The information provided by price comparison sites is easy to access.	Pearson Correlation	.153**	.348**	1	.291**	.015	.132*	-.061
	Sig. (2-tailed)	.005	.000		.000	.778	.014	.256
	N	343	344	349	340	348	348	347
The information provided by price comparison sites is good value.	Pearson Correlation	.193**	.396**	.291**	1	.068	.023	.021
	Sig. (2-tailed)	.000	.000	.000		.206	.670	.695
	N	338	338	340	343	343	342	341
When booking a holiday I am very concerned about financial risk.	Pearson Correlation	.143**	-.008	.015	.068	1	.537**	.493**
	Sig. (2-tailed)	.008	.879	.778	.206		.000	.000
	N	346	346	348	343	351	350	349
When booking a holiday I am very concerned about performance risk.	Pearson Correlation	.059	.020	.132*	.023	.537**	1	.504**
	Sig. (2-tailed)	.277	.707	.014	.670	.000		.000
	N	345	346	348	342	350	351	348
When booking a holiday I am very concerned about physical risk.	Pearson Correlation	.076	.023	-.061	.021	.493**	.504**	1
	Sig. (2-tailed)	.160	.671	.256	.695	.000	.000	
	N	344	344	347	341	349	348	349

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Appendix 4e – Correlation Matrix for Printed Travel Guide

Correlations

		The information provided by printed travel guides is unbiased.	The information provided by printed travel guides is up to date.	The information provided by printed travel guides is easy to access.	When booking a holiday I am very concerned about financial risk.	When booking a holiday I am very concerned about performance risk.	When booking a holiday I am very concerned about physical risk.
The information provided by printed travel guides is unbiased.	Pearson Correlation	1	.183**	.142**	.052	-.042	.008
	Sig. (2-tailed)		.001	.008	.341	.437	.889
	N	343	340	342	341	342	340
The information provided by printed travel guides is up to date.	Pearson Correlation	.183**	1	.290**	.058	.034	.092
	Sig. (2-tailed)	.001		.000	.286	.536	.090
	N	340	343	342	341	342	340
The information provided by printed travel guides is easy to access.	Pearson Correlation	.142**	.290**	1	.008	-.047	-.025
	Sig. (2-tailed)	.008	.000		.885	.378	.649
	N	342	342	346	345	346	344
When booking a holiday I am very concerned about financial risk.	Pearson Correlation	.052	.058	.008	1	.537**	.493**
	Sig. (2-tailed)	.341	.286	.885		.000	.000
	N	341	341	345	351	350	349
When booking a holiday I am very concerned about performance risk.	Pearson Correlation	-.042	.034	-.047	.537**	1	.504**
	Sig. (2-tailed)	.437	.536	.378	.000		.000
	N	342	342	346	350	351	348
When booking a holiday I am very concerned about physical risk.	Pearson Correlation	.008	.092	-.025	.493**	.504**	1
	Sig. (2-tailed)	.889	.090	.649	.000	.000	
	N	340	340	344	349	348	349

**. Correlation is significant at the 0.01 level (2-tailed).

Appendix 4f – Correlation Matrix for Online Travel Guides

Correlations

		The information provided by online travel guides is unbiased.	The information provided by online travel guides is up to date.	The information provided by online travel guides is easy to access.	When booking a holiday I am very concerned about financial risk.	When booking a holiday I am very concerned about performance risk.	When booking a holiday I am very concerned about physical risk.
The information provided by online travel guides is unbiased.	Pearson Correlation	1	.192**	.216**	.040	.017	.008
	Sig. (2-tailed)		.000	.000	.465	.759	.887
	N	345	336	337	343	343	341
The information provided by online travel guides is up to date.	Pearson Correlation	.192**	1	.167**	.068	.070	.065
	Sig. (2-tailed)	.000		.002	.211	.201	.232
	N	336	342	336	341	340	339
The information provided by online travel guides is easy to access.	Pearson Correlation	.216**	.167**	1	.004	.065	.013
	Sig. (2-tailed)	.000	.002		.937	.231	.815
	N	337	336	344	343	343	341
When booking a holiday I am very concerned about financial risk.	Pearson Correlation	.040	.068	.004	1	.537**	.493**
	Sig. (2-tailed)	.465	.211	.937		.000	.000
	N	343	341	343	351	350	349
When booking a holiday I am very concerned about performance risk.	Pearson Correlation	.017	.070	.065	.537**	1	.504**
	Sig. (2-tailed)	.759	.201	.231	.000		.000
	N	343	340	343	350	351	348
When booking a holiday I am very concerned about physical risk.	Pearson Correlation	.008	.065	.013	.493**	.504**	1
	Sig. (2-tailed)	.887	.232	.815	.000	.000	
	N	341	339	341	349	348	349

**. Correlation is significant at the 0.01 level (2-tailed).

Appendix 4g – Correlation Matrix for Independent Traveller Review Sites

Correlations

		The information provided by independent traveller review sites is unbiased.	The information provided by independent traveller review sites is up to date.	The information provided by independent traveller review sites is easy to access.	When booking a holiday I am very concerned about financial risk.	When booking a holiday I am very concerned about performance risk.	When booking a holiday I am very concerned about physical risk.
The information provided by independent traveller review sites is unbiased.	Pearson Correlation	1	.288**	.260**	.064	.145**	.037
	Sig. (2-tailed)		.000	.000	.240	.007	.498
	N	346	341	343	344	344	343
The information provided by independent traveller review sites is up to date.	Pearson Correlation	.288**	1	.281**	.057	.044	.080
	Sig. (2-tailed)	.000		.000	.294	.414	.138
	N	341	346	345	345	344	343
The information provided by independent traveller review sites is easy to access.	Pearson Correlation	.260**	.281**	1	-.047	.078	-.086
	Sig. (2-tailed)	.000	.000		.379	.147	.112
	N	343	345	348	348	347	346
When booking a holiday I am very concerned about financial risk.	Pearson Correlation	.064	.057	-.047	1	.537**	.493**
	Sig. (2-tailed)	.240	.294	.379		.000	.000
	N	344	345	348	351	350	349
When booking a holiday I am very concerned about performance risk.	Pearson Correlation	.145**	.044	.078	.537**	1	.504**
	Sig. (2-tailed)	.007	.414	.147	.000		.000
	N	344	344	347	350	351	348
When booking a holiday I am very concerned about physical risk.	Pearson Correlation	.037	.080	-.086	.493**	.504**	1
	Sig. (2-tailed)	.498	.138	.112	.000	.000	
	N	343	343	346	349	348	349

**. Correlation is significant at the 0.01 level (2-tailed).

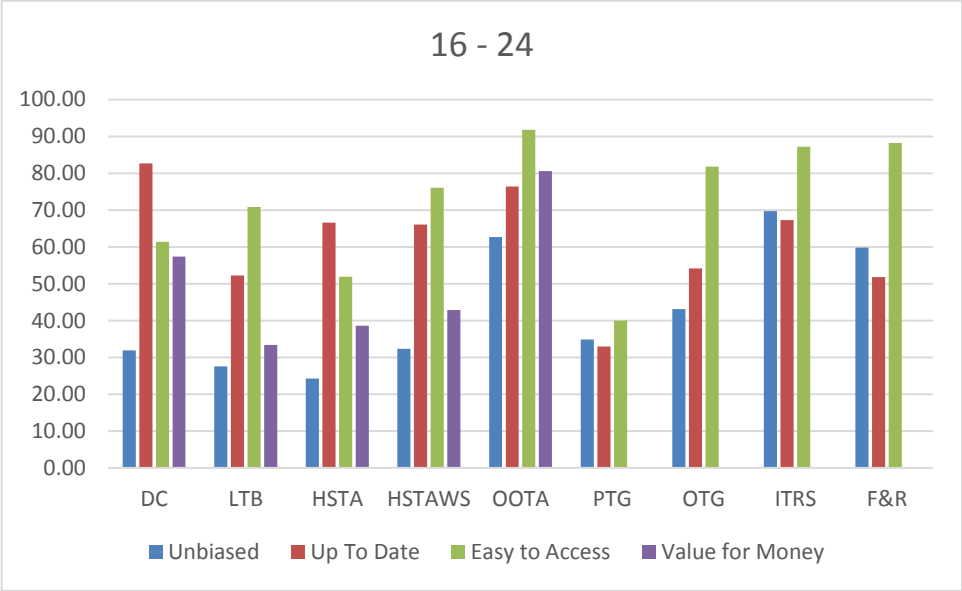
Appendix 4h – Correlation Matrix for Friends and Relatives

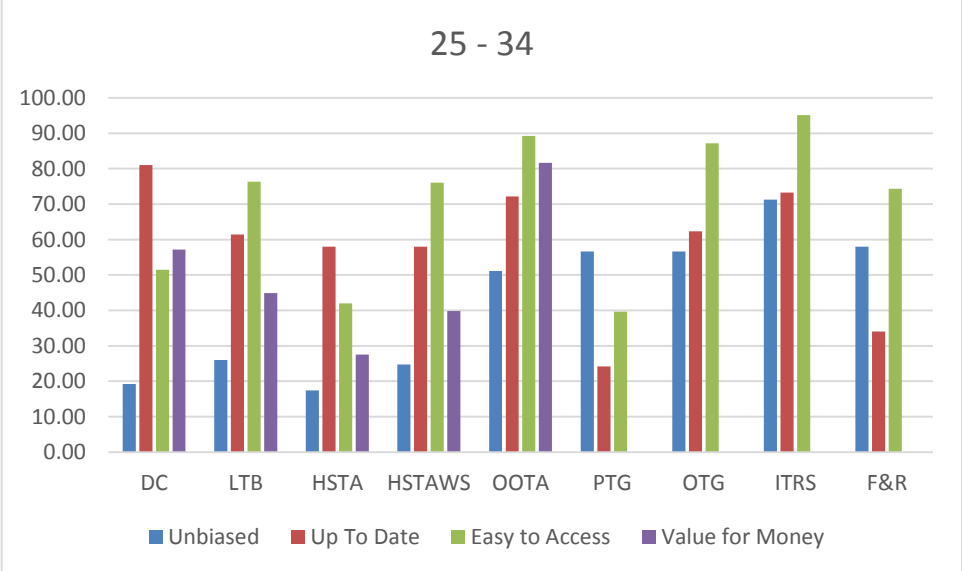
Correlations

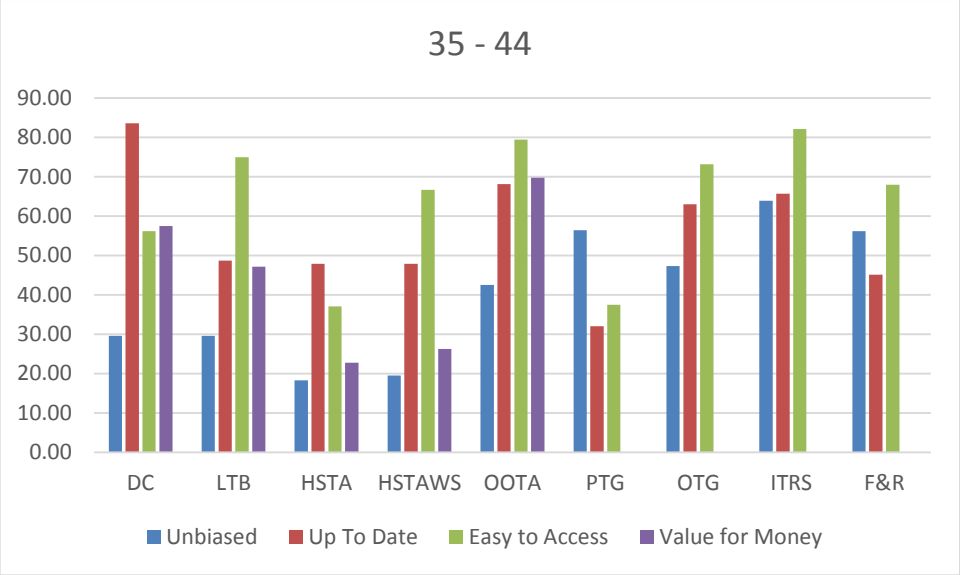
		The information provided by friends and relatives is unbiased.	The information provided by friends and relatives is up to date.	The information provided by friends and relatives is easy to access.	When booking a holiday I am very concerned about financial risk.	When booking a holiday I am very concerned about performance risk.	When booking a holiday I am very concerned about physical risk.
The information provided by friends and relatives is unbiased.	Pearson Correlation	1	.339**	.174**	.059	.093	.064
	Sig. (2-tailed)		.000	.001	.272	.085	.234
	N	345	338	340	344	343	342
The information provided by friends and relatives is up to date.	Pearson Correlation	.339**	1	.270**	.032	.071	.066
	Sig. (2-tailed)	.000		.000	.557	.189	.228
	N	338	342	340	341	340	340
The information provided by friends and relatives is easy to access.	Pearson Correlation	.174**	.270**	1	-.051	-.007	-.071
	Sig. (2-tailed)	.001	.000		.343	.901	.188
	N	340	340	345	345	344	344
When booking a holiday I am very concerned about financial risk.	Pearson Correlation	.059	.032	-.051	1	.537**	.493**
	Sig. (2-tailed)	.272	.557	.343		.000	.000
	N	344	341	345	351	350	349
When booking a holiday I am very concerned about performance risk.	Pearson Correlation	.093	.071	-.007	.537**	1	.504**
	Sig. (2-tailed)	.085	.189	.901	.000		.000
	N	343	340	344	350	351	348
When booking a holiday I am very concerned about physical risk.	Pearson Correlation	.064	.066	-.071	.493**	.504**	1
	Sig. (2-tailed)	.234	.228	.188	.000	.000	
	N	342	340	344	349	348	349

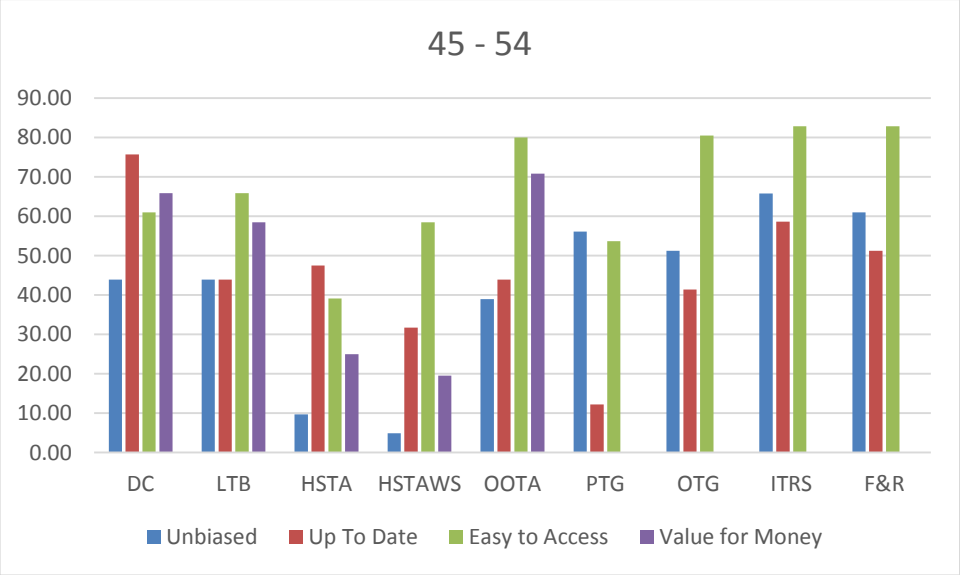
**. Correlation is significant at the 0.01 level (2-tailed).

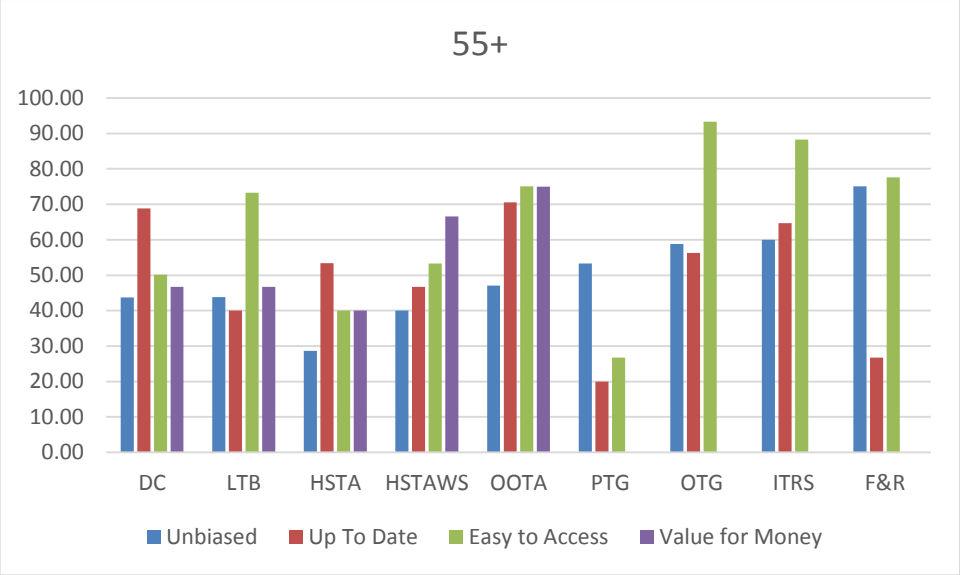
Appendix 5 – Perception of Information Sources amongst Age Demographics



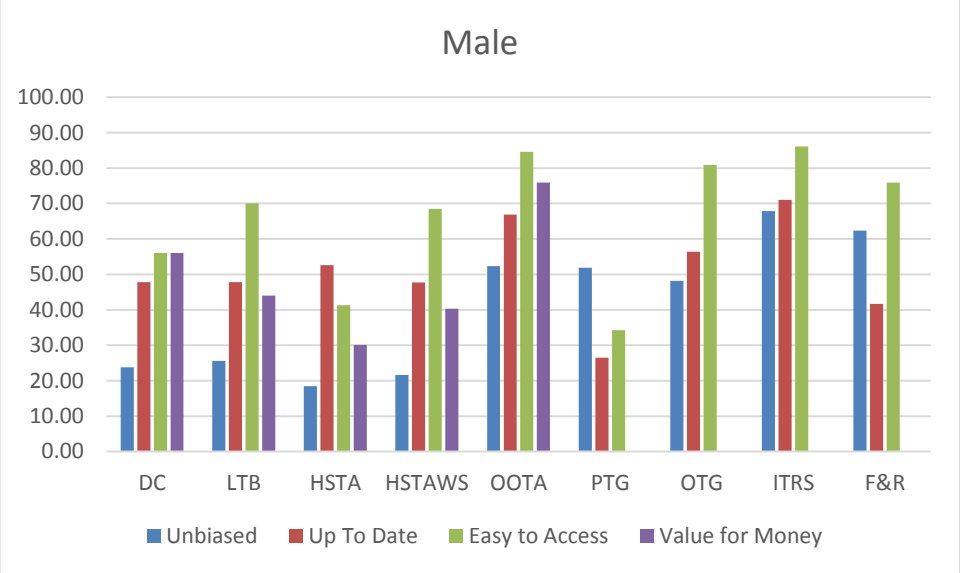


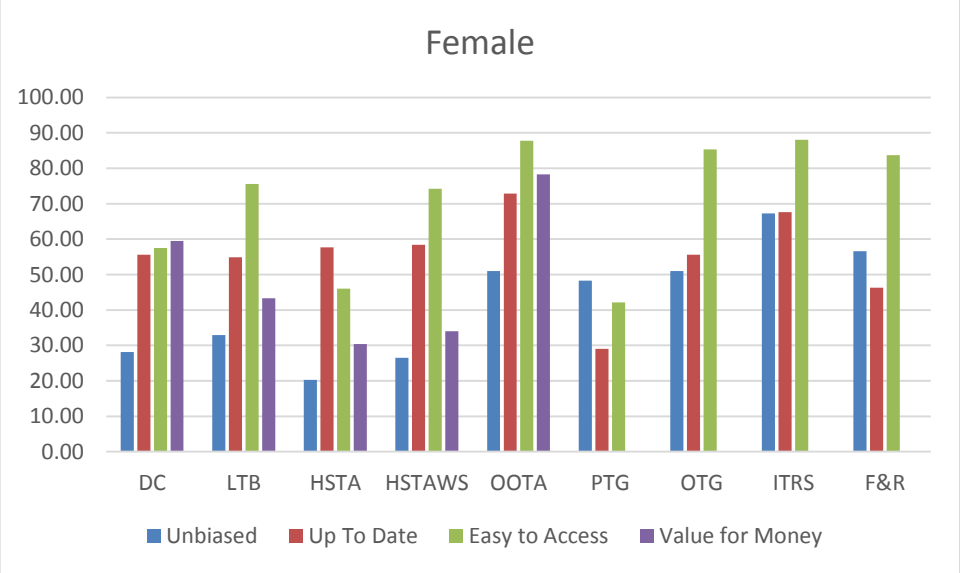

35 - 44
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
DC
LTB
HSTA
HSTAWS
OOTA
PTG
OTG
ITRS
F&R
Unbiased
Up To Date
Easy to Access
Value for Money


45 - 54
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
DC
LTB
HSTA
HSTAWS
OOTA
PTG
OTG
ITRS
F&R
Unbiased
Up To Date
Easy to Access
Value for Money

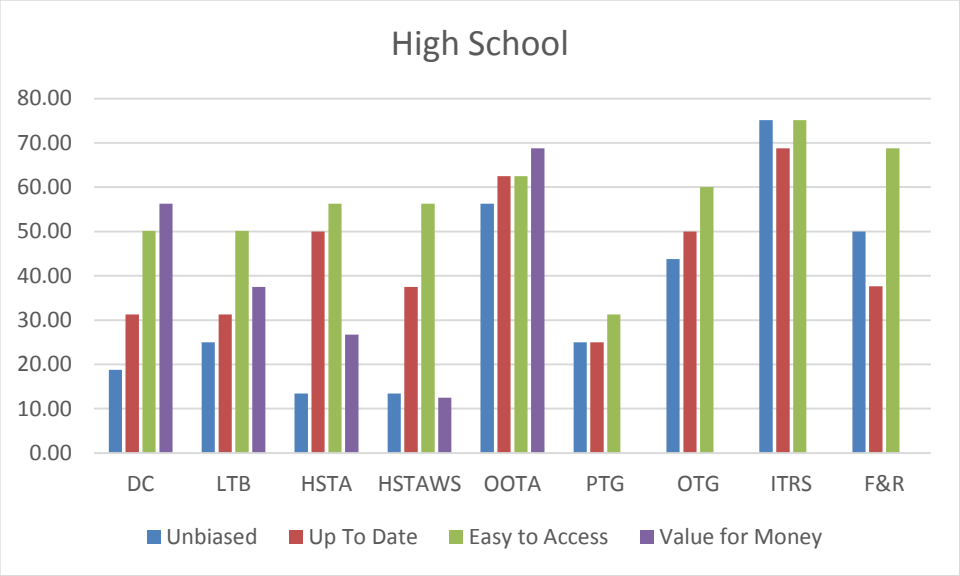

55+
100.00
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
DC
LTB
HSTA
HSTAWS
OOTA
PTG
OTG
ITRS
F&R
Unbiased
Up To Date
Easy to Access
Value for Money

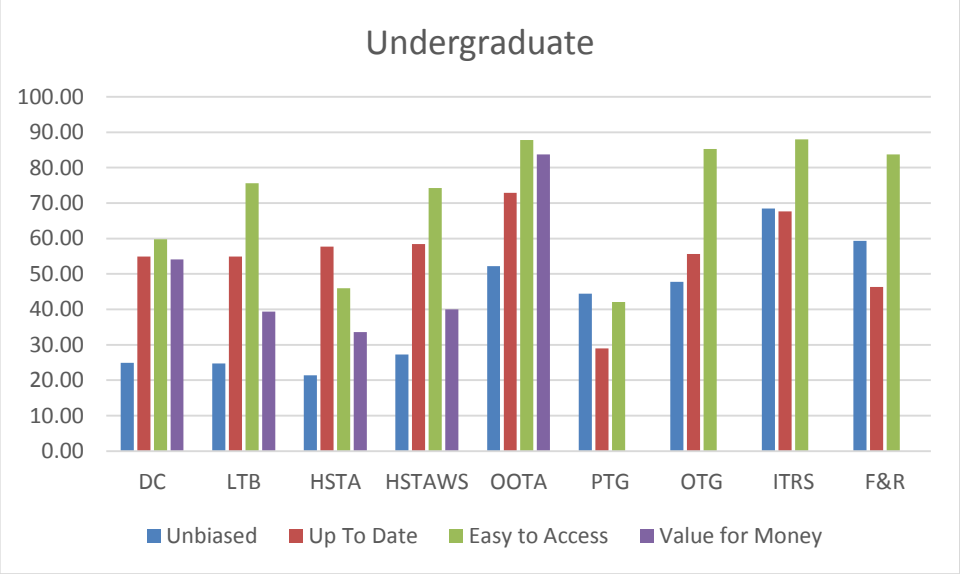
Appendix 6 – Perception of Information Sources amongst Genders

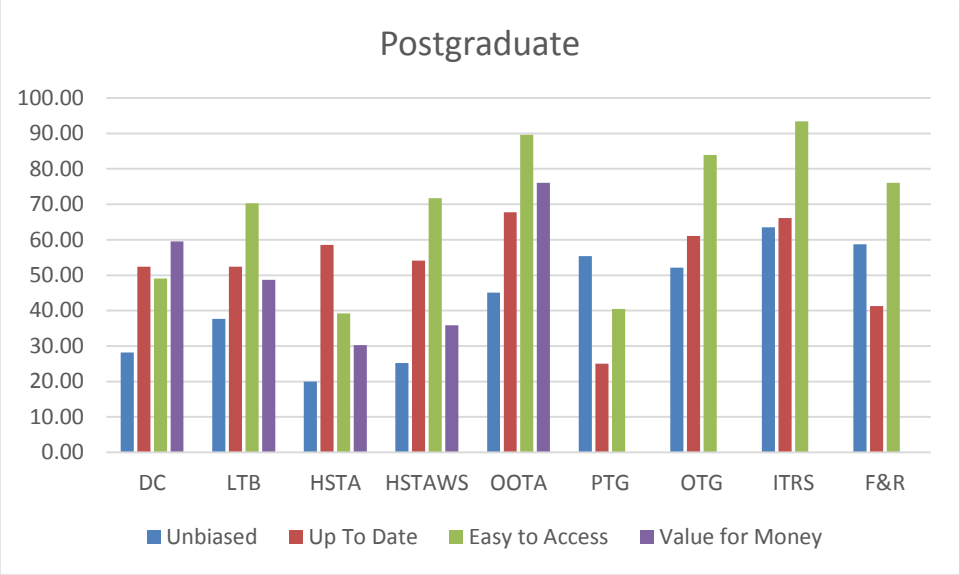


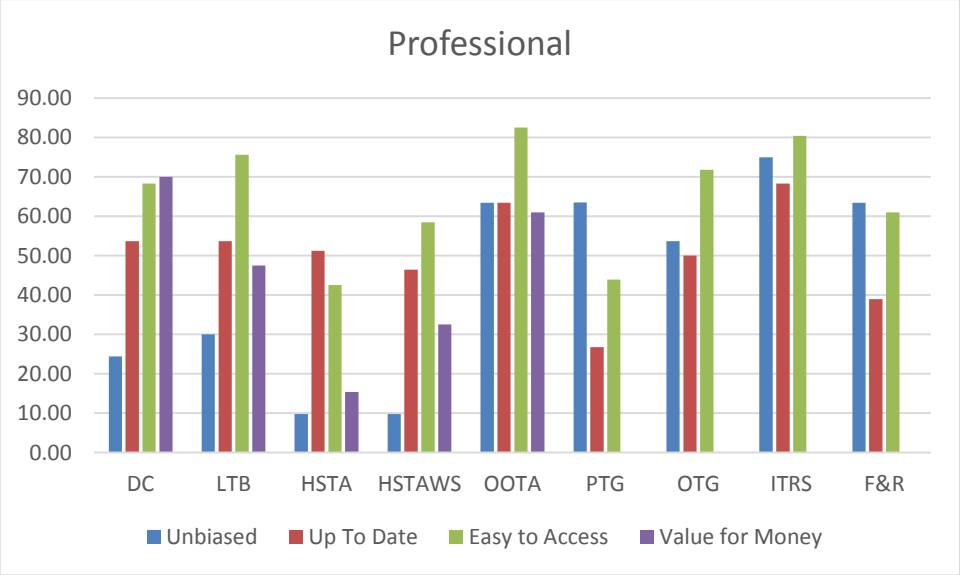


Appendix 7 – Perception of Information Sources amongst Education Demographics

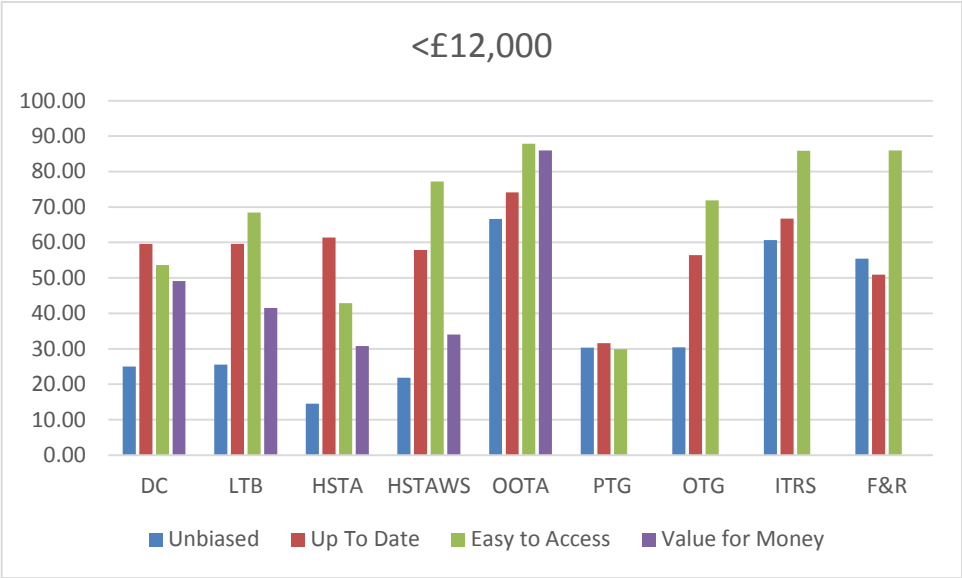


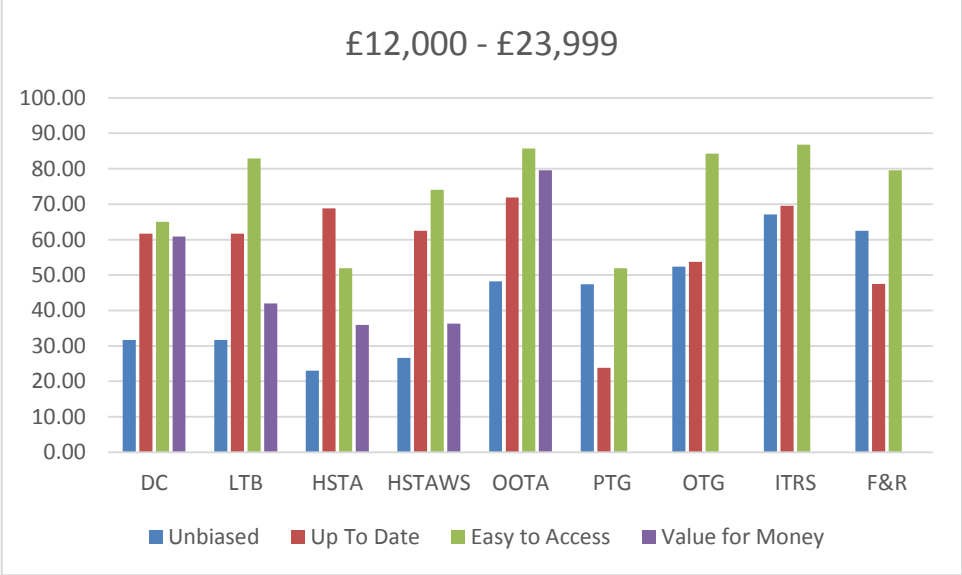


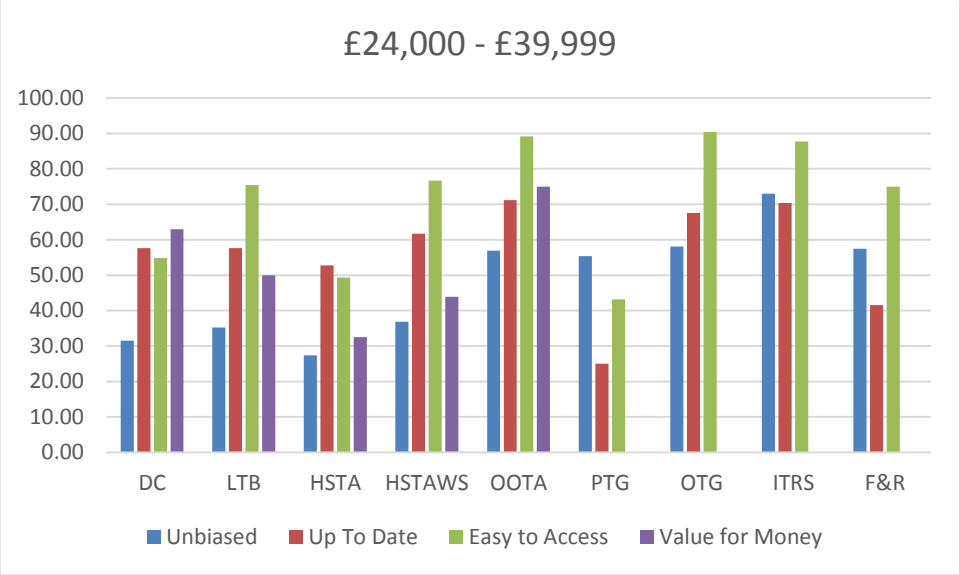

Postgraduate
100.00
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
DC
LTB
HSTA
HSTAWS
OOTA
PTG
OTG
ITRS
F&R
Unbiased
Up To Date
Easy to Access
Value for Money

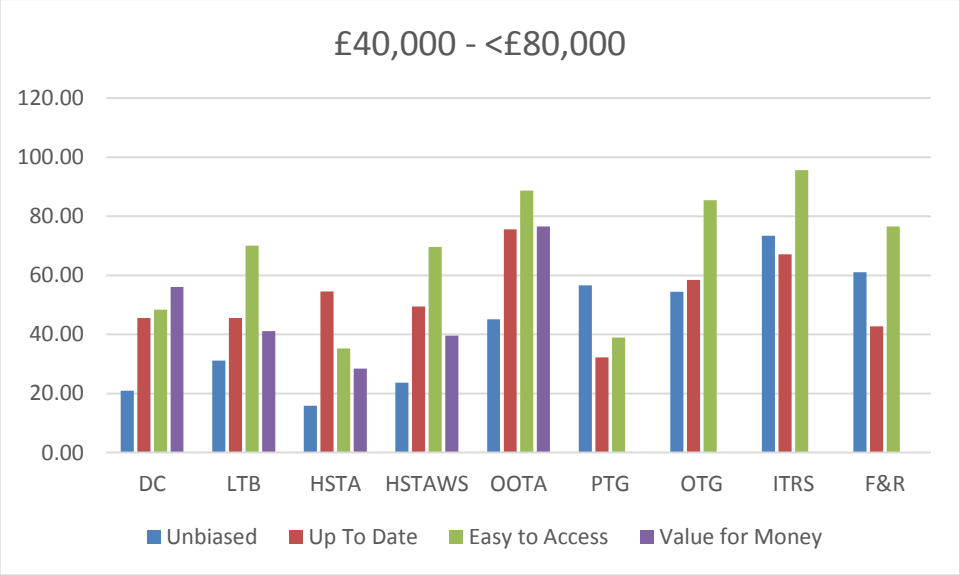

Professional
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
DC
LTB
HSTA
HSTAWS
OOTA
PTG
OTG
ITRS
F&R
Unbiased
Up To Date
Easy to Access
Value for Money

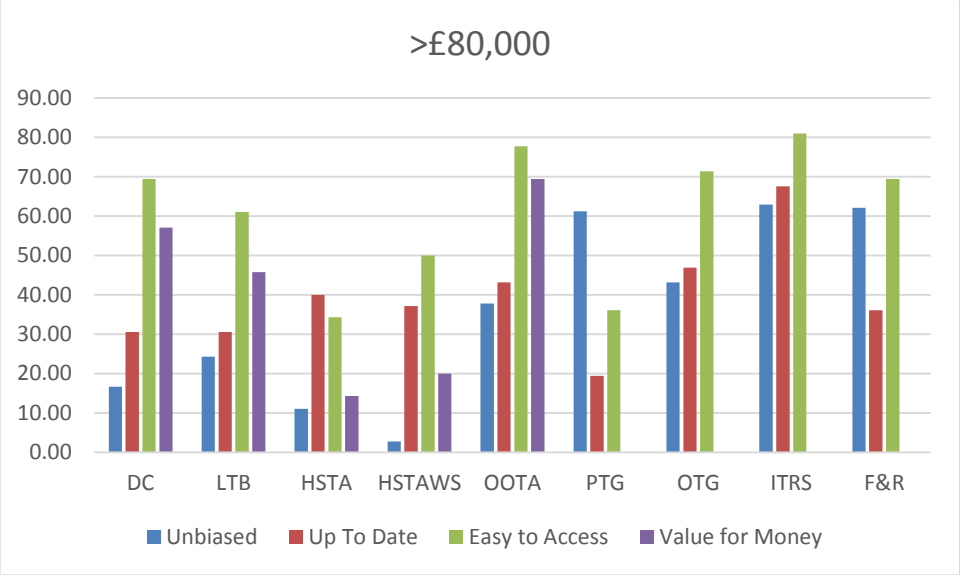
Appendix 8 – Perception of Information Sources amongst Household Income Demographics



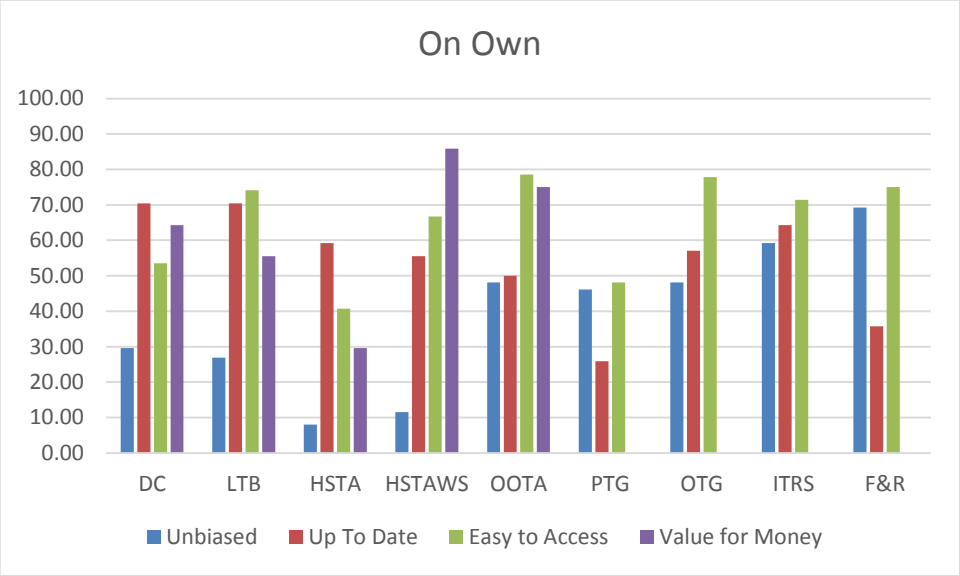


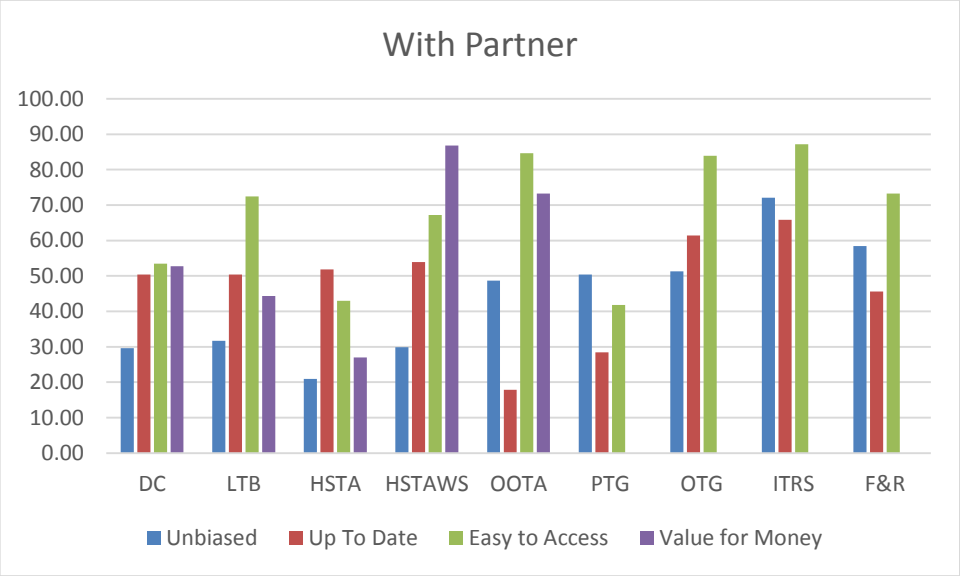

£24,000 - £39,999
100.00
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
DC
LTB
HSTA
HSTAWS
OOTA
PTG
OTG
ITRS
F&R
Unbiased
Up To Date
Easy to Access
Value for Money

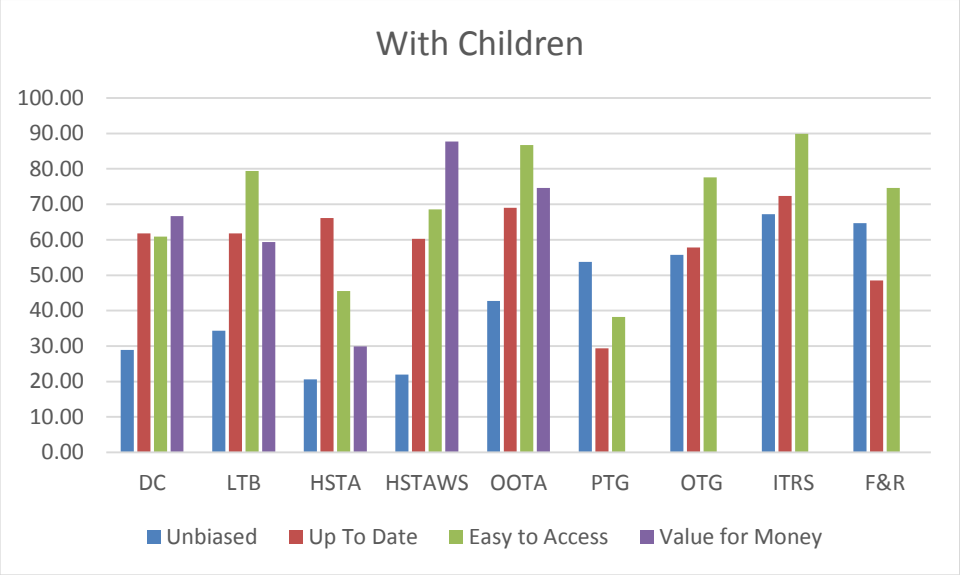

£40,000 - <£80,000
120.00
100.00
80.00
60.00
40.00
20.00
0.00
DC
LTB
HSTA
HSTAWS
OOTA
PTG
OTG
ITRS
F&R
Unbiased
Up To Date
Easy to Access
Value for Money

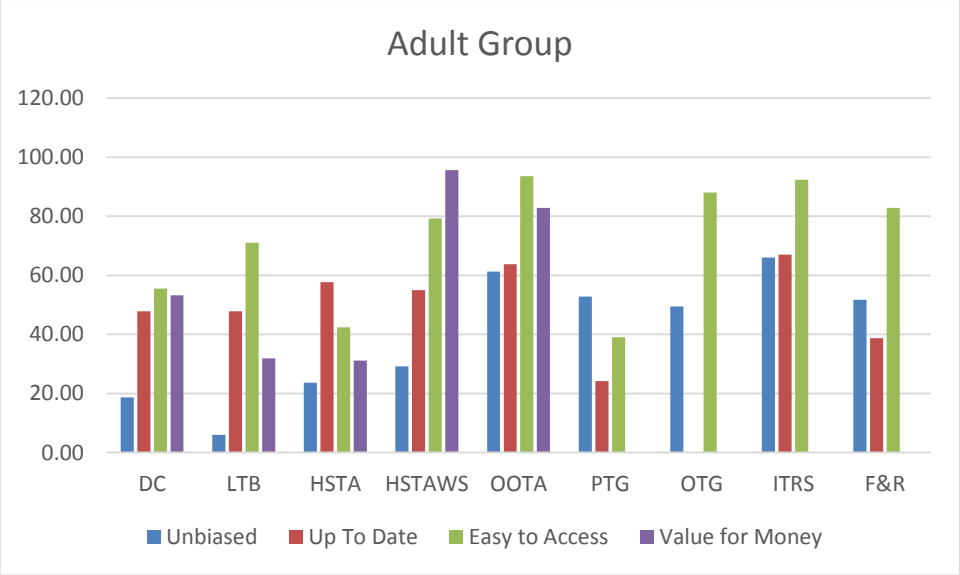

>£80,000
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
DC
LTB
HSTA
HSTAWS
OOTA
PTG
OTG
ITRS
F&R
Unbiased
Up To Date
Easy to Access
Value for Money

Appendix 9 – Perception of Information Sources amongst Travel Parties






With Children
100.00
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
DC
LTB
HSTA
HSTAWS
OOTA
PTG
OTG
ITRS
F&R
Unbiased
Up To Date
Easy to Access
Value for Money


Adult Group
120.00
100.00
80.00
60.00
40.00
20.00
0.00
DC
LTB
HSTA
HSTAWS
OOTA
PTG
OTG
ITRS
F&R
Unbiased
Up To Date
Easy to Access
Value for Money

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Anseel, F., Lievens, F., Schollaert, E., and Choragwicka, B. (2010). Response rates in organizational science, 1995–2008: A meta-analytic review and guidelines for survey researchers. *Journal of Business and Psychology*, *25*(3), 335-349.

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