Investigating flow facilitated by art-making, and potential implications on identity, conflict and wellbeing

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Contents

4

5

List of Tables

List of Images

Acknowledgments

This I declare about the Lord:
He alone is my refuge, my place of safety; he is my God and I trust him
Psalm 91:2

Thank you Father for guiding my every footstep, all glory and honour to You

Mommy, Daddy and Jordan, I'm so grateful God chose you to be my family.

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Jaynie, you made everything so much easier, and lighter just by being you.

To all of my friends and family, who prayed with and for me, cried with me, checked in on me. Thank you from the bottom of my heart.

Abstract

The aim of this research is to explore the facilitation, experience and measurement of flow (Csikszentmihaly, 1979), and group flow in particular, through individual and collaborative creating and to note the potential implications of this for identity, wellbeing and conflict. Previous research on group flow facilitated by collaborative arts is limited to the medium of music (Pels, Kleinert & Mennigen, 2018; Gaggioli, Chirico, Mazzoni, Milani & Riva, 2015; Gloor, Oster & Fischbach, 2013; Hart & Blasé, 2016; Keeler, Roth, Neuser, Spitsbergen, Waters & Vianney, 2015; Macdonald, Byrne & Carlton, 2006; Sawyer, 2006; Zumeta, Basabe, Wlodarczyk, Bobowik & Paez, 2016). There is also very little research exploring the role of identity within collaborative arts and possible implications for intergroup conflict resolution (Zelizer, 1997; Nemeth & Nemeth Brown, 2003; Crocker & Luhtanen, 1990; Worchel & Coutant, 2004; Zelizer, 2003; Balkrishnan; 2017; Lee, 2013). Research addressing these concerns is presented in six studies in this thesis.

Study 1 measured flow using Jackson & Marsh's (1996) Flow State Scale and found no difference in flow scores between art and non-art collaborative task groups, indicating that capturing the ephemeral nature of flow in a group art activity presents particular empirical challenges. More propitiously, study 2 explored identity, experiences of flow and of collaborative creating through semi-structured interviews with University of Salford students, where thematic analysis revealed the development of themes from initial negative feelings and assumptions toward the out-group; comfort with the initial in-group; a sense of responsibility/respect for all; a need to express; unity/togetherness; and change in feelings/atmosphere. Themes indicate the lived experience of group flow and potential implications for identity and the salience of group conflict.

Study 3 draws data from Study 1 and performs a semiotic analysis of artwork procured from each creating condition. The semiotic analysis identified symbols including unity and peace and provided useful insights into the experiential nature of collaborative creating placed in a setting where participants initially identify as opposing groups.

Study 4 demonstrated no significant differences in flow (measured again using the Flow State Scale) between individual and collaborative creating, but also revealed a significant positive relationship between flow and the engagement construct of stress (measured by Helton's Short Stress Scale), thus implicating flow in wellbeing and psychological health, potentially regardless of the type of art activity involved.

Study 5 draws from data from Study 4, and performs a semiotic analysis of artwork taken from the individual and collaborative creating conditions. Symbols were identified from the collaborative condition, that highlight inclusivity and potentially synchronicity that can be closely related to being in group flow (Sawyer 2015). Insights on differences between individual and collaborative creating are also identified. The 6th and final study explores the creating experience further through exploring the lived experiences of artists through Interpretative Phenomenological Analysis (IPA). From the artists' perspectives, 6 super-ordinate themes were derived including *my art, my own; groups coming together to create; a relaxed, safe space; blending; the inevitable conflict; impact, openness and release*.

From these themes, the lived experience of group flow is demonstrated and discussed in the context of identity, wellbeing and conflict.

Overall this research has potentially important implications for identifying the appropriate ways in which to measure flow and group flow, provides insight into the experiences of artists engaging in collaborative creating, and indicates a prospective role for flow in wellbeing and for identity salience and the perception of inter-group conflict.

Chapter 1. Literature Review

1.1 Introduction

This chapter will outline the rationale for the research presented in this thesis. The aim of this research is to investigate the theory that group flow, facilitated by collaborative creating, enables a salience of identity between groups with pre-existing opposing identities. More specifically, notions and practices of group flow and collaborative art, and their function in facilitating a salience of identity will be examined and how this salience of identity could have a potential impact in the context of intergroup conflict and well-being (Tajfel & Turner, 1979). The key topic areas covered in the literature review are, 'flow' (Csikszentmihalyi 1975, 1990, 1992), art, and social identity (Tajfel& Turner, 1979) to provide a theoretical background which suggests that group flow, facilitated by collaborative creating, may result in a new shared identity (Decloe, Kaczynski & Havitz, 2009; Hart & Blasé, 2016; Rufi, Wlodarczyk, Paez & Javaloy, 2016). This relationship will be discussed with regards to potential implications on wellbeing and intergroup conflict.

1.2 What is Flow?

The term flow, coined by Csikszentmihalyi (1975), refers to a psychological state defined by complete absorption and involvement in a task (Csikszentmihaly, 1979). The combination of enjoyment and focus allows for an optimal state of being, termed as flow. Mazzola and Cherlin (2009) expand on Csikszentmihalyi's definition and describe flow as a phenomenological theory of consciousness. In other words, flow focuses on awareness, more specifically, when awareness becomes centred on a particular task.

Csikszentmihalyi's studies on the concept of flow began with observing artists during creating, and he increased his scope of observation by interviewing various people with several professional avenues such as athletes, musicians and doctors. Several researchers (Csikszentmihalyi 1975, 1990, 1992; Hefferson and Ollis 2007, Keith, 2003, Nakamura & Csikszentmihalyi, 2002) have observed and consequently propose that the following conditions are ideal for facilitating the occurrence of flow:

(i)   The goal must be a challenge but also attainable

(ii)   Clearly set goals or instructions

(iii)   Immediate feedback available about progress being made

With these conditions, researchers (Csikszentmihalyi 1975, 1990, 1992; Hefferson and Ollis 2007, Keith, 2003; Panebianco-Warrens, 2013; Jackson, 1992, Nakamura & Csikszentmihalyi, 2009) have also been able to establish from participant accounts the following descriptions of what occurs while one is in the flow state:

(i)   Loss of self- consciousness

(ii)   Loss of sense of time

(iii)   Intrinsically rewarding in a sense that the goal is merely a vindication for the process

(iv)   Focused attention on the present task

(v)   Merging of the action and consciousness

(vi)   A sense of control over one's actions

To illustrate, Warren (2006) describes her own flow experience during mountain climbing. She describes climbing for 19 hours but for most of that period, losing a sense of time as a result of being completely absorbed in the task at hand. She also describes that her and her climbing partner forgot about themselves and became engrossed in the process of climbing. Warren's description of her mountain climbing experience contains many

parallels to the characteristics described above for the flow state. It is also interesting to note that Warren (2006) details a sense of trust that emerged specifically in the climbing relationship between partners. In other words, the task provided an avenue of trust in that partners were not only dependent on each other, but confident in each other's ability to work together to successfully climb to the top.

Jackson (1992) provides another illustration of flow, wherein he interviewed sixteen former United States National Champion Figure Skaters and their experiences in achieving an optimal skating experience. From his interviews, he discovered that many of their descriptions of entering optimal skating paralleled the above-mentioned characteristics of getting into flow and achieving flow. It is also interesting to note that the skaters who performed in pairs described unity with their partner as an important aspect of maintaining an optimal experience.

The concept of flow has been widely used in a variety of studies under different contexts (Chirico, Serino, Cipresso, Gaggioli & Riva, 2015), but mainly in sporting activities (Jackson, Thomas, Marsh & Smethurst, 2001; Swann, Keegan, Piggott & Crust, 2012) in the workplace (Fullagar & Kelloway, 2009; Bakker, 2008; Csikszentmihalyi & Csikszentmihalyi, 1992; Nakamura & Csikszentmihalyi, 2009), and through music (MacDonald, Byrne & Charlton, 2006; O'Neill, 1999; Fullagar, Knight & Sovern, 2013; Diaz, 2013;Wrigley and Emmerson, 2013; Hart and Di Blasi, 2015; Cohen & Bodner, 2018). Flow has also been observed across a wide span of ages including young children (Custodero, 2005), school aged children (O'Neill, 1999) and adults (Butkovic, Ullen & Mosing, 2015). The following section will explore what takes place when one is in flow.

1.2.1 What happens as a result of being in flow?

According to Csikszentmihalyi (2014), flow is widely considered a positive experience which facilitates persistence and a desire to return to the task or activity due to the rewarding feeling that flow provides. Flow has also been observed to facilitate creativity, motivation and efficacy (Salanova et al., 2014; Jackson et al., 2001; Engeser, 2012; Fritz and Avsec, 2007; Zubair & Kumall, 2015, Cseh, Phillips & Pearson, 2014). Studies also show a positive correlation between flow and self-esteem (Wells, 1988; Adlai-Gail, 1994). Evidence also suggests a significant positive relationship with mindfulness, with the exception of the loss of self-consciousness construct of Flow (Chen, Liu, Chiou & Lin, 2019). Hallaert (2019) found that artistic activities that facilitate the flow state may serve as protectors from the risk of suicide. Studies also show positive correlations between flow and well-being (Reynolds & Prior, 2016; Nakamura & Csikszentmihalyi, 2009). Generally, studies on Flow discuss the positive effects of being in flow, and the idea of flow itself is considered to be a positive state of being which also brings more meaning to life (Nakamura & Czikszentmihalyi, 2009).

It is important to note that there is some discussion of potential negative effects that could occur from being in flow. Csikszentmihalyi (2002), posits that some may become addicted to incessant searching of the flow state. He argues that some individuals as a result of the positive experience associated with the flow state, may be reluctant to deal with other aspects of life that are perceived as uncertain. Partington and Partington (2006) also conducted a qualitative study of surfers and suggest based on participant testimony, that participants seemed addicted to the pleasurable state of flow and would often pursue surfing, regardless of other important commitments. These authors suggest that it would be prudent to explore any association between flow and dependence. Dixon, Stange, Larche, Graydon, Fugelsang & Harrigan (2018) discuss the idea of *dark flow* as it relates to people addicted to gambling. They describe the state of immersion that gamblers have to their slot

games as dark flow. It is interesting to note that flow in this case was also positively

correlated with positive affect. The researchers suggest that this state of flow may provide

momentary separation from a state of depression once their consciousness is focused on

the task. It is this potential role of flow in wellbeing that will be investigated in the

research studies that are presented later.

It is interesting to note that the state of flow itself is not considered negative, but

the characteristic of flow as a focused state of consciousness on a particular task, and the

facilitation of positive affect, that may possibly facilitate addiction or dependence. It is

also possible to experience flow during activities that may be considered less positive or

moral, such as gambling (Dixon et al, 2018). However, the nature of flow as a facilitator of

positive wellbeing has been well established (Cziksentmihalyi, 2014) and this will be

explored further in the studies presented later in the thesis and in the next section of this

chapter.

1.2.2 Flow and similar states: Stress and Mindfulness

This section will describe similar states to flow and their relationship to flow with

the use of relevant studies. Schutte and Malouff (2011) found that increased flow is

associated with joyful curiosity, exploring and tolerance of stress. Nakamura and

Csikzentmihalyi (2002) describe flow as a positive psychological state which, when

utilized in the workplace, would elicit rewarding experiences in what could be considered

a stressful environment (Hallber & Schaufeli, 2006). Interestingly, Keller (2016) suggests

that flow has similar characteristics to stress, in that they both involve a high involvement

in a task, great mental effort and are both consequences of a challenging task. It is also

interesting to note that stress has been associated positively with flow (Peifer et al., 2014,

2015, 2019; Tozman et al., 2015, 2017). It is arguable, that the point at which flow and

stress differ, may be due to the fact that in flow, the challenge is perceived as attainable, whereas stress has been defined as involvement in a seemingly unattainable task, or in other words, one evaluates his/her own resources as insufficient to cope with the activity or task at hand (Lazarus and Folkman, 1984; Peifer, 2012). Csikszentmihalyi (1990), posits that flow occurs when a situation is appraised as a *pleasant challenge*. Empirically, there is evidence to suggest that some degree of stress may facilitate the presence of flow. This has been demonstrated by doctors, who have been observed to get into flow by Csikszentmihalyi, performing challenging and often high risk medical procedures (Csikszentmihalyi, 1975).

Similarly, mindfulness is a state that shares characteristics of flow as it relates to concentration to the task as well associations with well-being (Chen, Tsai, Lin, Chen & Chen, 2018). Arguably, one of the most plausible differences between mindfulness and flow is that flow is based on optimal performance on a particular task which is characterised by focused immersion on that task. Though mindfulness is also characterised by focus, this focus is not limited to a particular task. Moreover, mindfulness usually requires the participants to focus their attention on the self. Mindfulness exercises often include a focus on ones' breathing, body movement as well as focused attention on what the body is feeling during various tasks and is also considered a form of training to improve concentration. This difference between mindfulness and flow emerges in one of the previously mentioned studies. Chen et al., (2019) find a positive relationship between several of the characteristics of flow and mindfulness, with the exception of loss of self-consciousness. One of the characteristics of being in flow, is a loss of self-consciousness to the task, whereas mindfulness requires maintenance of self-consciousness. Researchers studying both flow and mindfulness have found causation between mindfulness training

and higher levels of flow (Kee & Wang, 2008; Chen et al., 2018) as well as positive correlations (Lambert & Csikszentmihalyi., 2019).

Although these concepts share similarities with flow, they exhibit unique qualities and have been tested to show their relationships with the concept of flow. These relationships may also assist when measuring flow. In the following studies, stress provides a validating variable when measuring the concept of group flow. As similar concepts, it would be useful to observe effects of, in this case collaborative creating, on both stress and the occurrence of flow. As mentioned in the Introduction, implications of flow facilitated by collaborative creating for wellbeing will also be investigated in the studies that follow. Moving forward, the following section will investigate the methods currently used to measure the flow state.

1.2.3 Measuring Flow

This section will discuss, compare and contrast the various methods of measuring flow. Considering the abstract and subjective nature of this phenomenon, it is challenging concept for which to provide measurement of its occurrence. One condition of the flow experience is the facilitation of loss of self. Arguably, this characteristic presents a difficulty in being able to measure the occurrence of flow. If a participant in a study on flow loses self-consciousness, it is reasonable to question whether they could accurately report on their own experience. If losing self-consciousness has an element of losing awareness, to what extent is it possible to report that occurrence after the fact?

From Warren's (2006) climbing example, she was able to express retrospectively that she had indeed experienced a loss of self-consciousness. More specifically, awareness shifted and became consumed by the task at hand. Her absorption with the task and

awareness on the task allowed her to realize that her awareness was momentarily not on the self. It is important to note however, that participants are unable to reflect in real-time their experience of flow without being out of the state of flow, and therefore, currently there are only retrospective accounts for subjective experience. Retrospective data may have elements of unreliability as it is reliant on memory.

In continuing this discussion, due to the nature of flow, researchers over time have chosen to adapt different methods of measuring the phenomenon (Moneta, 2012). This section will compare studies that have utilized different methods of measuring Flow. There are several studies implementing the interview technique (Hefferson & Ollis, 2006; Crust, Keegan, Piggott & Swann, 2011) and as in the case of Seifert and Hedderson (2010), a combination of observation techniques and interviews. Interviews also allow for flexibility to explore and understand the subjective experience of the participant (Pace, 2004), and identify situation specific occurrences or observations (Fave, Massimini & Bassi, 2011). Interviewing methods are most helpful in studies recruiting small samples, but it is not a feasible method for studying large samples (Jennett, Cox, Cairns, Dhoparee, Epps, Tijs & Walton, 2008).

The Experience Sampling Method (ESM) examines what people do in their everyday life, their feelings and descriptions of Flow in real time and context (Magyarodi et al, 2013; Csikszentmihalyi, Larson & Prescott, 1977). Participants are asked to write down their activities for a particular day and describe which are most enjoyable. However, according to Magyarodi et al. (2013) the disadvantage of this method was that participants only provided a few particular descriptions that may not have always provided the complete picture of their activities. As a result, the pager method was implemented (Csiksentmihalyi et al., 1977). During this method, the pager would activate at random times and participants would then answer a self-report questionnaire about the activity, their feelings and mood.

20

This method proves beneficial in that flow, emotions and levels of focus can be measured at a personal level, and any patterns across these states may be measured as well (Magyarodi et al, 2013). One of the main disadvantages of using ESM is the use of self-reports, wherein participants may not always be willing to divulge the activities they are participating in if they do not feel comfortable with others being aware of those activities (Csikzentmihalyi & Larson, 2006). Also, the implementation of ESM proves to be very expensive (Magyarodi et al, 2013). Another potential issue with ESM, particularly the pager method, is the interruption of the actual activity which would inevitably stop flow.

The narrative description survey is described by Novak and Hoffman (1997) as the most general method of measuring flow. In this instance, participants describe an occurrence in which they experienced flow, after which the activity is evaluated on a scale. This method may prove beneficial for gathering generic experiential evidence and is described as the least specific measure of flow (Magyarodi et al, 2013).

Recently, there have been several measures developed for measuring flow as it relates to specific situations (Magyarodi et al, 2013). Appendix A provides a table showing a summary of situational questionnaires for flow and what they measure as amalgamated by Magyarodi et al (2013). The table shows that quantitative measures of flow allow for situation specific measurements of flow and also different dimensions of flow conditions and consequences. Information gathered from Csikszentmihalyi's qualitative studies as mentioned above, provide a basis from which to operationalize these dimensions. In other words, elements such as loss of self-consciousness are operationalized on these scales and participants respond with the appropriate answer which describes the level at which this occurred. Situations vary from work related flow to computer-based flow, which is an advantage of using a quantitative measure. Also, these measures can be used to test large populations in various contexts.

On the other hand, there are limitations to using quantitative measures of flow. Jackson and Marsh (1996) give an example from the Flow State Scale. The Flow State Scale contains questions that have been derived by summarizing and condensing qualitative research in which participants detail their descriptions of being in flow. An example question from the Flow State Scale is as follows; *I was challenged, but I believed my skills would allow me to meet that challenge*. Participants would then answer on a scale of 1 to 5 with 1 meaning Strongly Disagree and 5 meaning Strongly Agree. Jackson and Marsh (1996) argue that there are limitations to using this measure as it can only be applied retrospectively. In their own study using the scale, they ask participants to respond to the scale thinking of an experience which stands out to them, to enhance validation by using a more memorable memory. A second limitation is the Flow State scale attempts to quantify an experience. Though this may be helpful in collecting and producing a somewhat objectified measurement of an abstract concept, the Flow State Scale is limited in the ability to extract a rich and complete picture of the individual experiences of participants who have entered flow. Csikszentmihalyi (1992) argues that too much emphasis should not be placed on any empirical measure of Flow, so as not minimize the experience by reducing it to scores on a questionnaire.

There are some studies that have measured physiological markers of the Flow State (de Manzano et al., 2010; de Manzano et al., 2013; Kivikangas, 2006; Keller et al., 2011; Mosing et al., 2012; Peifer et al., 2014; Tian, Bian, Wang, Gao, Chen, 2017; Ullén et al., 2012; Ulrich et al., 2014). For example, de Manzo et al (2010) have analysed heart rate and blood pressure during piano performances of professional pianists. High flow performances were associated with higher heart rate and blood pressure. Ulrich et al., investigated neural activity responses to flow using functional magnetic resonance perfusion imaging while participants performed mathematics tasks. The presence of flow was associated with

increased neural activity in some parts of the brain (left anterior inferior frontal gyrus and left putamen) a decrease in others (amygdala and medial prefrontal cortex). Physiological measures of flow reduce issues of reliability as the measures of flow are not necessarily associated with report measures of the participants, but rather can be measured as the participants are taking part in the activity. Such measures however may not be widely accessible and may also cause distractions if equipment has to be worn or felt during the activity.

There are several advantages and disadvantages across measures. Choosing the correct measure is reliant on the aim and context and population of the study (Delle Fave, Massimini & Bassi, 2011). Qualitative study provides the opportunity for a rich understanding of the personal experiences of participants while quantitative study allows for situation specific information of a large population. Physiological measures allow for measurement of physical consequences of being in flow without total reliance on self-report measures. Most of the studies mentioned in this section, describe the measurement of flow at an individual level. As this study aims to explore group flow more specifically, the following section will discuss group flow further, along with any associated measures.

1.2.4 Flow as a collective concept

Magyarodi and Olah (2015) reiterate the point mentioned above that several studies on flow have been conducted at the individual level, due to its nature of being a subjective state (Magyarodi and Olah, 2015 & Pels; Kleinert & Mennigen, 2018). More specifically, the interaction that is observed and studied, takes place between the individual and the task (Reynolds et al., 2010), rather than between two or more individuals or even two or more groups. From Jackson's (1992) examples of flow while ice-skating and Warren's (2006)

example of flow during mountain climbing, the reader is introduced to a possibility of flow extending beyond the self with a partner. Recently, there has been an increasing interest in the concept of group or social flow (Pels, Kleinert & Mennigen, 2018). Though there is currently no clear definitive conception of the idea of group flow (Nakamura and Czikszenmihaly, 2002), there are however, a few theoretical and experimental attempts to conceptualize flow at a collective, social level.

Sawyer (2015), building on Czikszentmihalyi's work, began to explore the concept of group flow by observing jazz ensembles. He observed ten elements of entering into group flow:

(i)   A goal that provides focus for the group

(ii)   Close listening to other group members

(iii)   Complete concentration

(iv)   A balance between control and flexibility toward the movement and direction of the group

(v)   The blending of egos

(vi)   Equal participation

(vii)   Familiarity or shared common knowledge

(viii) Communication with group members

(ix)   Keep moving forward and building on what is being said

(x)   Potential for failure

It is important to note that these observations from Sawyer (2015) were as a result of studying jazz bands and the process of improvisation and performance. As a result, it is probable that other studies observing group flow in different contexts, may find that conditions may vary or may be described differently. For example, Gloor et al., (2013) also describe synchronicity of movement as an aspect of being in flow, while observing Jazz

musicians performing. Building from Sawyers' (2015) initial exploration of group flow,

researchers have categorized the concept of collective flow by several terms and defined

accordingly. These terms include group flow (Armstrong, 2008; Gloor, Oster, Fischbach,

2013; Hart & Blasi, 2015; Kaye, Bryce, 2012; Sawyer, 2006), social flow (Walker, 2010;

Keeler, Roth, Neuser, Spitspergen, Waters, Vianney, 2015), shared flow (Zumeta, Oriol,

Telletxea, Amutio & Basabe, 2015; Zumeta, Basabe, Wlodarczyk, Bobowik & Paez; 2016)

and networked flow (Duff, Giudice, Johnston, Flint & Kudrick, 2014; Gaggioli, Chirico,

Brivio, Mazzoni & Riva, 2015; Galimberti, Chirico, Brivio, Mazzoni, Riva, Milani et al.,

2015).

Pels, Kleinart & Mennigen (2018) point out that the discussions of flow at a

collective level describe both individual and collective aspects of group flow. For example,

Hart and Blasi (2015) define group flow as individuals experiencing all the characteristics

of flow while engaging in a communal activity with a common goal. Similarly, Kaye and

Bryce (2012) define group flow as a shared experience which allows each person to achieve

individual flow. Sawyer (2006), takes this concept a bit further and describes group flow as

a state in which group members are interacting in sync, to the point where they can anticipate

their other group members actions before they act. Sawyer (2015) is moving out of the

individual experience and suggesting that group flow provides an atmosphere where

participants' interaction with each other connects them to a point of being able to

predetermine forthcoming actions, as it relates to the communal activity. Gaggioli et al.,

(2011; 2015; 2016) describe networked flow as a "*collective state of mind"* where the entire

group is performing to the best of its ability. In other words, the group is working together

toward the goal and communally absorbed in the task. While describing networked flow,

Galimberti et al., (2015, p.33) describes a "*systemic emergence"* which is as a result of the

group interactions. It is important to note that the concept of group flow is still being

researched and developed, and there is no definitive definition for flow in a collective state (Pels, Kleinert & Mennigen, 2018). The current research on the concept still leaves open questions about group Flow. For example, is it sufficient to consider group flow as individuals experiencing flow individually while working on a group task? Can one individual in a group experience group flow while the others do not? Is it methodologically possible to measure a *"collective state of mind"*, or to even ascertain if this takes place? Can one person in a group vouch with certainty that other group members experiences flow, or can one only describe their own emergence? These questions shed light on the vast amount of potential areas where there is room for more research on the concept of group flow.

With some understanding of the conceptualizations of group flow, the following section will discuss what takes place when a group is considered to be in flow.

1.2.5 What happens as a result of being in Group Flow?

Pels, Kleinert & Mennigen, (2018) separate the empirical findings of group flow into three separate categories, precursors, characteristics and outcomes. With regard to precursors, as detailed above, Sawyer (2007) provides the conditions for group flow facilitation, with which several studies are in agreement (Primus & Sonnenburg, 2018; Kaye & Bryce, 2014; Hart & Blasi, 2016; Kaye, 2016; Gloor et al, 2013; Armstrong, 2008). With regard to identifiable characteristics of being in group flow, studies identified synchronicity of body movement as well as interaction between participants (Gloor et al., 2013; Sawyer 2006).

Researchers have found that being in group flow allows for a blending of identity with the group and social unification (Zumeta et al, 2016). Within the context of education, researchers discovered group Flow resulted in a greater understanding and attentiveness

toward the task (Culbertson, Fullager, Simmons & Zhu, 2015). Interestingly, within the context of education, greater performance was not considered to be a consequence of group flow. However, in the context of music, Gloor et al., (2015) found that group flow allowed for not only better performance of the musicians, but also a stronger applause from the audience. Decloe, Kaczynski and Havitz (2009) discovered that group flow served as an intermediary between a collective identity and group efficacy. Similarly, researchers found collective efficacy to be an effect of being in group flow (Salanova, Rodriguez-Sanchez, Schaufeli & Cifre, 2014). The frequency of the occurrence of group flow within social experiences is shown to be positively correlated with the quality of these social relationships (Bakker et al., 2011; Rathunde, 1997; Salanova et al., 2014).

It is important to note that research presented above suggests that group flow facilitates a collective identity as well as unity. This research is within the context of one group and interpersonal feelings between members of that one group. As a result, one question being explored by this study, is whether two groups with opposing salient identities working together on one artistic task, would result in the same facilitation of a collective identity and unification.

Another aspect to consider is the measurement and ability to establish whether group flow has occurred or is occurring. The following section will explore ways in which group flow can be established and measured.

1.2.6 Measuring Group Flow

Currently, there are both qualitative and quantitative measures used to capture group flow (Pels, Kleinert & Mennigen, 2018). As group flow is a phenomenon that is still being understood and defined, there are several ways that this concept has been explored.

Under the qualitative category, there are several methods of data collection used, for example, observations (Admiraal, Huizenga, Akkerman & ten Dam, 2013; Armstrong, 2008), semi-structured interviews (Hart & Blasi, 2015) and focus groups (Kaye & Bryce, 2012). Each method of collecting data, is tailored to answer specific questions or to add to the growing understanding of the concept.

To illustrate, Armstrong (2008) conducted a study looking at group flow within two groups of middle school students in a mathematics class. Students were given mathematical problems that would facilitate collaboration between them. Data was collected through video recordings transcribed and analysed by the researcher. In this case, the researcher decided against interviews as he/she believed that interviews would only provide a subjective, individualistic experience, as opposed to being able to observe synchronicity of actions, facial expressions and movements among participants. This method of data collection is grounded on the basis that one of the primary outcomes of group flow is synchronicity, thus observation techniques were considered suitable.

Hart and Blasi (2013) conducted another qualitative study, but their study included the use of semi-structured interviews with musicians of their experiences in jam sessions. To complement this, the researcher also participated in a jam session with other musicians and wrote down observations. This study aimed to contribute to the understanding of group flow by understanding personal experiences of the phenomenon. Two positions are evident here, one researcher suggests group flow is best observed externally, and purports that individual accounts of flow would not properly define the group experience (Armstrong, 2008). However, in the second example, the researcher seeks to understand the experiences of group flow through individual experiences, and he/she takes this further by gaining a first person experience of the phenomenon by engaging in the activity and writing up observations (Hart & Blasi, 2013).

Quantitative methods have also been used in studies to explore the concept. Measures include the Flow State Scale (Jackson and Marsh, 1996) and several adaptions (Martin & Jackson, 2008; Bakker, Oerlemans, Demerouti, Slot & Ali, 2011; Gaggioli, Mazzoni, Milani & Riva, 2015; Gaggiolio, Chirico, Mazzoni, Milani & Riva, 2015; Heyne, Pavlas & Salas, 2011; Kaye, 2016) and the Shared Flow Scale, which is an adaptation of the Dispositional Flow Scale mentioned previously, has been employed by researchers (Zumeta et al., 2015; 2016). Walker (2010) includes one item to measure the state that participants felt most often, with flow being one of the states and other researchers develop their own constructed group flow measure particular to their study variables (Salanova, Rodriguez-Sanchez, Schaufeli & Cifre, 2014; Ryu & Parsons, 2012; Primus & Sonnenburg, 2018).

Quantitative methods, particularly the flow state scale, lend themselves more to exploring the individual experiences of flow in a group setting, similar to Hart & Blasi's (2013) position. Both positions have provided valuable information. Measuring group flow through external methods such as observation, provide tangible examples of consequences of being in flow such as synchrony. However, the individual experiences and self-reports provide information from the individual, as to whether or not they perceive to have experienced flow and what that experience entailed for them. As group flow is still a concept that is being developed, perhaps at this stage, information gathered both from an individual level and an external level provide insight in capturing more knowledge about flow.

As it relates specifically to measuring group flow within the context of art, as explained further below, current group studies of flow within the realm of arts focus on music. Researchers have also adopted both quantitative and qualitative methods. Quantitative methods include the Flow State Scale (Jackson and Marsh, 1996) and the

Experiential Sampling method (Csikszentmihalyi, Larson & Prescott, 1977). Gloor et al., (2013) also conduct a quantitative study, by using sociometric badges to measure the synchronicity of movement among band members. They found that the more synchronized the band members, the better they played and the more intense the response from the audience. This measure allowed them to gauge the levels of synchronicity at varying parts of the performance. Qualitative methods include semi-structured interviews and observation (as detailed above by Hart & Blasi, 2013).

Within the realm of music, the majority of the studies have used qualitative analysis which has been helpful to target specific variables in relation to flow. Arguably however, as is the case with flow, the experience of creating together in a group should not be limited to questionnaire data (Czikzentmihalyi, 1990). One reason being that this area is still being explored as a concept and any experiences should be explored without limitations of a questionnaire. Secondly, art itself is considered such an ambiguous concept to define, that it would arguably require the in-depth exploration that is offered by qualitative analysis. Group flow is still a concept that is being defined and determined, and even more so, group flow in the context of collaborative creating. As a result, the research presented here aims to delve into this vast concept and an exploratory approach is taken using qualitative methods while at the same time using standard quantitative methods to measure established variables.

1.2.7 Flow and the Self

As mentioned previously, the majority of studies on flow focus on the individual, with several accounts mentioning the state of flow occurring at a personal level. From the above-mentioned examples, one of the characteristics re-iterated by persons in flow is a

loss of self-consciousness. This concept is further explained by Nakamura and

Csikszentmihalyi (2009) as loss of awareness of oneself. Csikszentmihalyi describes an

example of a person keeping a boat safely on course during a rough night at sea. He

explains that one can lose complete self-consciousness while immersed in the task of

keeping the boat steady until relieved by another person or until safe on dry land.

Awareness becomes completely centred on the action and there is no awareness to the self.

From this example, loss of self-consciousness is described as forgetting oneself or

completely losing awareness of oneself as a result of being completely engrossed in a task.

It becomes helpful at the point to understand Csikszentmihalyi's definition of the self. He

defines the self as consciousness awareness (Nakamura & Csikszentmihalyi, 2002). In

other words, the self refers to awareness of whatever is a part of one's consciousness. He

postulates that humans have the ability to direct their attention, think, to feel, to choose and

remember. It is the awareness of these abilities and the actions that they have gathered

over time that constitutes the self. Simply put, the self is an awareness of what is in one's

consciousness.

The self is described as a phenomenon that continues to grow and develop

(Nakamura & Csikszentmihalyi, 2002). For clarity, Csikzentmihalyi describes the

occurrence of hunger. He postulates that without consciousness, hunger would

immediately result in searching for food, without a thought. However, the existence of

consciousness allows for a choice based on a particular goal. He gives the example of

potentially skipping lunch with a goal of losing weight, or choosing to save money or

choosing to fast. The self is an awareness of this consciousness and continues to grow and

develop based on a variety of circumstances and environments. With this in mind, one can

attempt then to clarify loss of self, loss of self-consciousness and whether there is a

difference between the two. Based on this discussion, a loss of self would refer to a loss of

awareness of one's consciousness. A loss of self-consciousness implies a loss of consciousness awareness; in other words, a loss of awareness of what is in one's own consciousness. With regard to flow, this loss of consciousness awareness is due to the fact that there is a merging of consciousness and task. In other words, one could argue that the task borrows one's awareness from the consciousness until the task is over. Taking this further, one could then argue that loss of self and loss of self-consciousness are the same concept. If loss of self implies loss of awareness of one's own consciousness, then loss of self is essentially a loss of self-consciousness. To gain a practical understanding of this theoretical framework a few examples will be analysed to further understand this concept.

Reynolds and Prior (2006) conducted a study looking at flow and artmaking. They aimed to come to an understanding of whether women living with cancer who engaged in artmaking described their experiences in line with the flow state and also if flow assisted in positive living. From this study, themes in line with Cziksentmihalyi's description of flow emerged including intense concentration and reduced awareness of environment and the self. Participants described being so completely engrossed in their work that they were able to expel any negative thoughts and fears about themselves and any negative thoughts about cancer. The authors note that as a result of being fully concentrated and losing a sense of time, that the patients lost awareness of themselves, their health, their pain and stress. In addition to this, outside of the art-making, 38 patients expressed being more observant and appreciative of their surroundings in their everyday life with less focus on negativity and the self. The authors conclude that not only did flow allow for intense concentration and loss of self-consciousness, but it also facilitated psychological growth, appreciation for the external environment and control. From this example, an evidential application of loss of self is portrayed. Participants describe being so engrossed in the art making that they forget themselves. They go even further to describe elements of their

self-consciousness that disappeared during creating such as negative thoughts of their own

health, stress and fears. It is also important to note that after the flow inducing activity,

their consciousness had shifted to having less negative thoughts and fears and more of a

positive appreciation for their environment. Not only does a loss of self become evident,

but also a new shaping of the self as a result of the exercise. In Warren's example outlined

above a practical application of the concept of loss of self also becomes evident. Warren

(2006) notes that they lost consciousness of themselves as their awareness became totally

focused on the task of climbing.

In sum, this section describes the characteristic of loss of self-consciousness as one

of the key characteristics of flow. The research reported later explores the possibility of

group flow providing a platform for the development of a social identity, which is

explored further in this section. This loss of self-consciousness to the task, could

potentially allow for a shared consciousness and potentially shared identity. Keeping this

idea in mind, the following section will provide a link between flow and Social Identity,

and review studies that have looked at these concepts together.

1.2.8 Flow and Social Identity

It has previously been mentioned that being in group flow facilitates a blending of

identity with the group and social unification (Zumeta et al, 2016). Similarly, Decloe,

Kaczynski & Havitz (2009) discovered that group flow served as an intermediary between

a collective identity and group efficacy, which refers to a groups' perceived ability to do the

task. Rufi et al (2016) also discovered that flow, positive emotions, loss of self-

consciousness, and social identity indicators correlate positively. Social Identity, (which is

discussed in more detail in section 1.4), is defined as a person's perception of who they are based on perceived group membership (Tajfel, 1979). To break down Rufi et al's (2016) discovery further, implications include the fact that if a group member experiences Flow, he/she not only feels more identified with the group, but also feels a solid emotional connection with the other group members. Rufi et al (2016) point out that it is the loss of self-consciousness that plays the role in creating a heightened sense of belonging between group members. In their own words, the authors explain that,

"This loss of self-consciousness effect, and the feeling of merging with the environment or with the group, is the mechanism that experientially articulates a change in the individual. Its consequence is the decline of personal identity and the salience of social identity in a group—since the group's consciousness absorbs individuals, who end up identifying themselves more as members of the group." (Rufi et al, 2016 pg. 388)

It is important to note here the effect that the loss of self has in this case. Rufi et al (2016) explain that a change occurs at the individual level, which transitions personal identity into a group identity. It is essential at this point to remember that it is flow which provides the context for this loss of self-consciousness to take place. Csikszentmihalyi (1990) reiterates this point by stating that loss of self-consciousness provides an avenue for people to essentially lose their own individual identities and take on new roles even if only for a moment. Rufi et al (2016) describe this change as a transformation of the individual identity to now include the identity of the group. Warren (2016) reiterates this idea of the transformation of the self and postulates that after flow takes place, the self is re-organized and this organization allows for new growth. Mao, Roberts, Csikszentmihalyi & Bonaiuto (2016) elaborate on flow in the context of artistic expression and relate that flow occurring as a result of personal expression could also be a representation of flow occurring as a result of expression of personal identity.

34

Though there are a few studies that address flow and personal expression (Waterman, Shwartz, Goldbacher, Green, Miller & Philip, 2003; Coatsworth et al. 2005; Shwartz, 2006, Waterman, 2004), as pointed out by Mao et al. (2016) there are little to no studies looking directly at flow and personal identity. There are however, a few studies indicating that there is an association between flow and personal identity (Coatsworth et al. 2006; Sharp et al, 2007). For example, Sharp et al. (2007) conducted a study that suggested an association between personal expression and self-defining activities. Self-defining activities are defined as any activity that represents oneself or who one aspires to be (Waterman, 2004; Coatsworth et al., 2005, 2006). However, this association was not clearly defined (Mao et al, 2016). Tietze (2008), conducted a case study exploring jazz music as a medium for improving the undergraduate liberal arts experience. The study posits that participating or engaging in jazz music facilitates flow as well as a strong personal identity (Mao et al 2016). Again this study does not explicitly make the link but draws attention to the connection between both concepts.

Rufi et al (2016) provides a foundation through which this study can build within the context of Social Identity. To summarize, engaging in a group interactive activity or challenge facilitates flow. Flow facilitates a loss of self-consciousness. This loss of self-consciousness then facilitates a loss of the individual identity and a gaining of a group identity which results in a state of harmony with group members. Rufi et al (2016) take this a step further and explain that once this takes place there is a temporary alliance that forms between the cognitions of group members. He explains this aligning of cognitions as a joint purpose or aim to be achieved from participating in the activity. Group members would have the same goals, purpose and idea of what will be represented throughout and at the end of the activity.

Culbertson, Fullager, Simmons and Zhu (2015) use social theories to discuss flow in social contexts. The Social Comparison Theory states that individuals turn to others around them for cues on how to feel and think (Festinger, 1954). Similarly, the Social Validation Theory states that individuals also take cues on how to behave from others in the environment, particularly in new or enigmatic environments (Cialdini, 2009). Culbertson et al. (2015), use these concepts to purport that Flow experiences may be influenced by those around them in a group context.

The above-mentioned research describes personal and social identity and possible relationships with flow. This relationship helps to form a theoretical background that could suggest flow facilitating a salient social identity amongst participants on the particular task. The task chosen in this particular study, is creating art. More specifically, collaborative arts. The following section will discuss studies and theories looking at flow and art to provide a rationale of the arts as the chosen medium.

1.2.9 Flow and art/artists

This section begins to describe the rationale for choosing collaborative creating as a means of facilitating flow, and discusses the presence of flow in the realm of creating art. Csikszentmihalyi (2013) states that while artists were creating, they became so focused that they became detached from their environment and any negative feelings. To illustrate context and evidence, Chilton (2013), describes her flow experience creating a clay bowl. She expressed feeling so completely engrossed in the activity that anything external seemed to fade away. Nakamura and Csikszentmihalyi, (2002) describe their own observations with artists, becoming so submerged in their creating that they ignored everything including bodily needs.

"It is what a painter feels when the colours on the canvas begin to set up a magnetic tension with each other, and a new thing, a living form, takes shape in front of the astonished creator." (Csikszentmihalyi, 1990 p. 3)

Here Csikszentmihalyi describes flow as what occurs as the artist is in the midst of the creating journey, as his tools and own physical movement begin to form an external expression in front of the creator. In this instance, he elaborates on the experience of a painter, however there are several studies that illustrate the facilitation of flow in various different avenues of artistic expression. Examples include music (Bakker, 2008; Mazzola and Cherlin, 2009; Panebianco-Warrens, 2014), digital art (Banfield & Burgess, 2013; Dawoud, 2015), writing (Dixit, 2008) and dance (Hefferon and Ollis, 2006; Doob, 2000; Paskevska, 2005). To further illustrate, Hefferson and Ollis (2006) conducted an Interpretive Phenomenological Analysis (IPA) of dancers' experiences of flow and found themes that coincide with all of Csikszentmihalyi's characteristics of flow as described previously. It is important to note also, that each dancer that was interviewed reported that they experienced a loss of self-consciousness. This loss of self-consciousness allowed for awareness to be focused only to the art form itself, which in this case was dance. In summary, research shows that creating art facilitates flow. Flow allows for a change in direction of focus. From Reynolds' and Prior's (2006) example it becomes evident that the art-making process allowed for less of a focus on negativity and a greater appreciation for life.

Within the realm of group flow, there are very few studies focusing on art-making. Currently, studies looking at group flow with an artform as the collaborative activity, focus on making music (Gaggioli, Chirico, Mazzoni, Milani & Riva, 2015; Gloor, Oster & Fischbach, 2013; Hart & Di Blasi, 2016; Keeler, Roth, Neuser, Spitsbergen, Waters & Vianney, 2015; Macdonald, Byrne & Carlton, 2006; Sawyer, 2006; Zumeta, Basabe, Wlodarczyk, Bobowik & Paez, 2016; Cheng, 2019). Studies exploring group flow and music

show that group flow facilitates social integration, a merging of identities, and well-being (Zumeta et al., 2016) and group flow is an outcome of group creativity along with improvisation and collaboration (Sawyer, 2006). Hart et al., (2016) found that group and individual flow has similar characteristics, and that group flow also facilitates empathy. Considering this group of studies, there is room to research the phenomenon of group flow in a wider spectrum of art-making activities, but more specifically within the context of collaborative creating in the midst of opposing identities, which is a gap that this study will aim to contribute to as explained further below.

The literature review thus far has explored the concept of flow and its relationship with the arts. The main aim of the literature review so far is to highlight and provide rationale for exploring group flow. Thus far there are few studies exploring group flow and even fewer exploring group flow within the arts. Studies have shown however, that group flow facilitates social identity within group members. The experiments in this study will explore this phenomenon and potential applications of this in wellbeing and intergroup conflict. In line with the introduction of flow and the arts, the following section will explore art, its meaning and application in group contexts and its association to identity.

1.3 What is art? - Defined from the artist's perspective

One may argue that the concept of art itself is one that is so ambiguous that attempting to define by one objective definition may prove to be an impossible task. Dickie (1969) points out that the question of defining art has long been an arduous and controversial argument that continues due to its abstract nature. Due to the very nature of art and its experiences, there are several attempts to define art arguably as a result of personal experiences with the concept. First this section will attempt to look at definitions of art from

the perspective of various noted artists, then compare with definitions of art within the context of psychology.

Merton (2005) defines art as a medium through which one loses themselves simultaneously with finding themselves. This definition places art in a contextual light within which the self is able to be lost and re-discovered. He takes it further and expresses that a mind that interacts with art is able to enter into a new level of being of which it previously did not know existed. In other words, art allows for one to not only lose themselves but to subsequently discover a new self. This definition describes art as a context or a channel through which these described experiences can take place. On the surface there is no understanding from this definition what art involves, how it is created or what it entails. Rather, from this definition one is able to determine an effect of experiencing art. Tolstoy (1996) based the concept of art on unified experience. He defines the central basis of art as the ability of one person to experience the same emotions that another person has experienced as a result of interacting with a product of their expression. Tolstoy purports that if a person has a cognitive and emotional experience which unites him/her with the creator and other people interacting with the work of art, then the entity which facilitates that cognitive experience is, in fact, a work of art. He goes further to suggest that work cannot claim the title of art unless it facilitates this experience of unity. In his own words,

"A real work of art destroys, in the consciousness of the receiver, the separation between

himself and the artist — not that alone, but also between himself and all whose minds

receive this work of art. In this freeing of our personality from its separation and isolation,

in this uniting of it with others, lies the chief characteristic and the great attractive force of

art." (Tolstoy, 1996 p. 140)

Tolstoy defines art with an important characteristic with which to identify art. He claims that the very nature of art lies within its ability to unite people together through the

experience of that object of expression. Interestingly, Tolstoy states that this unity occurs between artist and observers of art, in that all experience the same emotion. He goes further to state that artist and observer are no longer separated as they become freed from a sense of self that is secluded, to a sense of self that is unified with others. It is interesting to note the similarities between both artists conceptualization of art. Both artists describe a loss of sense of self as a primary characteristic of what art entails. Both artists also describe discovery of a new sense of self. For Merton (2005), this new sense of self is described as a new being which was unknown to the person before. For Tolstoy (1996) this new sense of self is as a result of a unity that occurs between artist and observer of art. Both artists in their definitions and descriptions of art, express that the very characteristic of art lies in the effect that it has on people.

Other artists take a different approach to defining art. Hubbard (1908) purports that *art is not a thing, it is a way*. From this definition, Hubbard places art in the context of a medium. This definition implies that art is a channel through which to accomplish something or through which something is accomplished. Tolstoy (1996) and Merton (2005) provide answers to what that something could be, namely to lose and re-discover oneself. Bukowski (2008), takes a somewhat different route to approaching defining art. He states the following,

"The way to create art is to burn and destroy ordinary concepts and to substitute them

with new truths that run down from the top of the head and out of the heart." (Bukowski,

2008, pg.2)

There are similarities evident here with between Bukowski and Tolstoy. Both artists align art with first destroying something that was present before the interaction with art takes place. Tolstoy talks about destroying borders between people to allow for unity and Bukowski talks about destroying conventional ideas. Bukowski also shares similarities with

40

Merton. Merton (2005) describes a new level of being that emerges from interacting with art. This could be interpreted as being simultaneous to Bukowski's destruction of ordinary concepts. This new level of being could be as a result of the substitution of new truths. It is interesting to note that for Bukowski (2004), this destruction of previous concepts takes place while the artist is creating. Tolstoy (1996) however, focuses on the receiver, in other words Tolstoy's definition encapsulates what takes place after the art is already created. Bringing both artists' perspectives together, one can note that creating art destroys previous concepts or ideas and interacting with art also has the same effect. In retrospect, Tolstoy (1996) stipulates that the breaking down of this separation between artist and receiver allows for this sharing of an experience to take place. In other words, the art provides a context within which both artist and receiver can share an experience or share emotions. Though Bukowski (2004) focuses on creating, if Tolstoy is correct in his description, then this experience of destroying ordinary concepts and replacing these concepts with new truths will also be a shared experience with the receiver. Tolstoy (1996) encapsulates the experience of art as having a primary quality of unity between artist and receiver, in that the product, which is the art, facilitates a shared experience. Incorporating Bukowski, it is arguably possible then for this burning and destroying of concepts to also be a shared experience. Though focusing on different areas of interacting with art, both artists observe art as destroying some aspect of the self; self-consciousness or ideas; and creating or facilitating a new self, for Bukowski (2004) this is described as new truths and for Tolstoy (1996) this newness is as a result of uniting with the creator and other observers.

It is interesting to note that these artists, though they differ in their personal descriptions of what art is, do not contradict each other. In other words, the definitions are not mutually exclusive. Merton (2005) describes art as a way in which we lose and gain ourselves. Bukowski (2004) describes what occurs as art is created and Tolstoy (1894)

describes what occurs as art is received or interacted with. By incorporating all of the above-mentioned characteristics art may be defined as a medium which allows for loss of self and re-discovery of the self in a new context which may include a unified identity with others. It is important to note here that art is described as a medium that breaks barriers. These characteristics provide some rationale for the arts being chosen as a means of exploring the salience of identity. In continuing to explore this, the following section looks at applications of art in psychology.

1.3.1   Applications of Art in Psychology: Art Therapy

"Art and therapy offer asylum to the soul, a safe place, a sanctuary, where the sometimes destructive work of transformation can take place. Since both art and therapy give asylum to the soul, then it makes sense to combine the two, and increase the resources of the sanctuary" (McNiff, 1989 p. 42)

According to the British Association of Art Therapists (B.A.A.T.), art therapy refers to a mode of psychotherapy, through which art media is the primary avenue of communication and expression (B.A.A.T., n.d.), and is grounded on the idea that expression through art is a healing avenue of exploring thoughts and emotions that may cause anxiety or be confusing (Malchiodi, 2003; B.A.A.T., n.d.).   Art therapy creates a space for individuals to artistically express feelings associated with intrapersonal or interpersonal conflicts (Marcow-Speiser & Speiser, 2007). Intrapersonal conflict refers to a persons' inner conflict within ones' own mind, whereas interpersonal conflicts relate to conflicts between two or more people (Cox, 2003). This method of therapy allows clients to discover and

express feelings that are often difficult to express verbally (Ferszt, Hayes, DeFedele, & Horn 2004; Gladding, 2005; Malchiodi, 1999, 2003). In other words, art therapy uses art as a means for individuals to express their feelings regarding a particular inner conflict.

1.3.2   Applications and Outcomes of Art Therapy

Recently, a number of researchers have explored and reviewed art therapy studies and their outcomes (Reynolds, Nabors & Quinlan, 2000; Slayton, Archer & Kaplan 2011; Maujean, Pepping & Kendall, 2014). Art therapy has been employed as a means of intervention for people with cancer, as well as relatives of those with cancer, (Svensk et al., 2009; Thyme et al., 2009; Piug, Min Lee, Goodwin & Sherrard, 2006) schizophrenia, (Richardson, Jones, Evans, Stevens & Rowe, 2007) incarcerated adults and adolescents (Ferszt, Hayes, DeFedele & Horn, 2004; Gussak, 2006; Hartz & Thick, 2005), depression (Zubala & Karkou, 2018) and several other contexts (Maujean, Pepping & Kendall, 2014). Researchers have found that the use of art therapy has resulted in improved communication (Sacchett, Byng, Marshall & Pound, 1999), improved self-esteem (Hartz and Thick, 2005; Ponteri, 2001), improvement in behaviour (Kerns, 2004; Saunders & Saunders, 2000) and several other cognitive, behavioural and affective improvements.

Some studies (White & Allen, 1971) also portray a comparison between art therapy and other therapies showing that art therapy provides a greater resource for change in self-concept. To illustrate, the first study recorded by Reynold et al's (2007) systematic analysis is a study conducted by White and Allen (1971). The study tested the hypotheses that pre-adolescent boys would show more growth in positive self-concept as a result of taking part in a counselling centred art program than as a result of an intensive non-directive counselling program, and that this growth effect will continue into adolescence. 15 boys were placed in

the art counselling group and met for 90 minutes, 5 days a week and engaged in activities designed to help the boys develop a more positive self-concept. The art counsellors' main goal was to assist in facilitating self-awareness through the artistic activities. The other 15 boys were placed in a traditional non-directive counselling group. The results supported the hypothesis and indicated the art focused counselling group was more effective in facilitating changes in self-concept. These examples provide evidence for McNiff's (1989) claim that art and therapy combined provide an even greater resource for the *destructive work of transformation* to take place.

1.3.3   Group Art Therapy

It is important to note that art therapy focuses on the individuals' expression and works toward breaking down intrapersonal conflict and in some cases, inter-personal issues. However, there is also evidence of art therapy used in a group setting (Schofield, 2019; Riley, 2013; Ferszt, Hayes, DeFedele & Horn, 2004; Gersch & Sao Joao Goncalves, 2006; Hosea, 2006; Nowicka-Sauer,2007; Seifert & Baker,2002). To illustrate, Ferszt, Hayes, DeFedele and Horn (2004) conducted group art therapy with incarcerated adult women, several of which had suffered from substance abuse as well as loss of loved ones. Though the women worked together in groups, they each completed individual works of art. The authors observed that group cohesion increased as the women became more and more inclined to casually speak to each other during the exercise. The women also became more likely to discuss personal issues as they were able to recognize some of their own issues in their group members' artwork which increased the level of camaraderie between them. This study highlighted the positive effects of art therapy in a group setting for women suffering with a range of mental health issues. An observation that arose from Ferszt et al., (2004) study was the benefit of this therapy taking place in a group setting. Art therapy in a group

setting facilitates communication and elicits empathy, support and positive feedback to each other (Malchiodi, 1998; Waller, 2003; Gladding, 2005). Taking this further, Malchiodi (2003), suggests that participating in group art therapy facilitates hope, interaction, and altruism alongside providing a platform for catharsis.

It is important to note here, that some of the effects mentioned of creating in group therapy show some similarity to the characteristics and effects of being in flow. Ferszt et al., (2004) mention communication and positive feedback between group members which are also characteristics that facilitate the presence of group flow. According to Sawyer (2007), group cohesion is one of the characteristics of being in flow, which is also illustrated by Gloor et al., (2015).

The research above highlights that art therapy has been widely used on an individual and group basis. Art therapy is by nature defined as a tool for breaking down inner conflicts and has extended toward proving beneficial in the context of interpersonal conflict. For example, Ferszt et al., (2004) highlight that incarcerated women became more empathetic with each other, communicated positively and were showing signs of group cohesion during a group art therapy session. Is it possible in that same context of prison, to use collaborative creating between groups of people who may be at odds with each other in prison? This is one example of a context wherein this study may prove beneficial.

In continuing, it becomes evident at this point that applications of art in psychology mostly focus on understanding and expressing the self and providing a platform to work through personal issues. The group context of art therapy portrays several benefits, however it is evident that the applications of art have not been attributed to intergroup conflict resolution, but rather focus on intrapersonal and interpersonal. One may ask the question at this point that if the power of using art has already proven beneficial thus far, can this idea of working together on artwork be contextualized to break down salient identities that

contribute to intergroup conflicts? The following section will delve more into this concept by looking specifically at research on collaborative art within the context of intergroup conflict resolution.

1.3.4 Collaborative Arts and Intergroup Conflict

It is important to re-iterate at this point that there is very little empirical evidence placing the process of creating collaborative art in the realm of intergroup conflict resolution (Zelizer, 2003). Even more specifically, there is much less research on the creation of art than there is in the consumption (Kou, Konrath, Goldstien, 2019). Research shows that participating in collaborative arts enhances social identity (Neel and Dentith, 2004), addresses community issues and builds community (Jones 1988). Community-based, collaborative art projects have also been used to bring the community together, to work toward completing a shared goal (Lowe 2000; 2001). Though collaborative arts have proven to have many positive effects in community building and development of collective identity (Bublitz, Rank-Christman, Cortada, Madzharov, Patrick, Peracchio, et al, 2019), researchers express that there is a need for exploration as there is a gap left for collaborative arts to join the conversation of intergroup conflict resolution (Lebaron, 2014; Bang, 2016).

According to Ramsbotham et al., (2011) the arts have an important role to play in conflict resolution. Currently, there is more of an emphasis on traditional approaches to problem solving, with a disregard for art-based approaches (Zelizer, 1997). Nemeth & Nemeth-Brown (2003) have stressed the importance of the ability to form creative solutions and problem solving for interpersonal and intergroup conflicts. There is very little literature describing experiments implementing arts as a strategy for conflict resolution, however, there are scholars (Crocker & Luhtanen, 1990; Worchel & Coutant, 2008; Zelizer, 2003) who express the importance of such an implementation. There are also books that

theoretically discuss potential applications of art as a means of peace-making (Liebmann, 1996; Epskamp, 1999), however there is little development or application of these artistic approaches that transcend interpersonal conflicts (Zelizer, 2003).

There are several organizations and movements present today that would provide evidence to suggest that there are people who believe in the power of art as a means of peace-making between groups. With regard to literature, there are studies that review the role of arts in conflict and provide recommendations for future studies (Bailey, 2019); there are also conferences that explore the arts and peace-making (e.g. Salzburg Global Seminar, 2016). There are also art integration programs that have been observed to facilitate social competency (Biscoe & Wilson, 2015) as well as social cohesion within the context of young children in school (Clarke-Manning, 2018). What is lacking in empirical psychological literature are studies that directly explore collaborative art-making as a means of peace-making between conflicting groups. This study aims to draw attention to the possible salience of identity formed within a group of people creating together and any effects this could potentially have in the intergroup conflict resolution discussion.

To further explore this phenomenon, a literature search was conducted to specifically explore studies that examined collaborative arts as a means of peace-making between conflicting groups. From this search three distinctive articles provide some evidence. Zelizer (2003) conducted qualitative research by interviewing 64 individuals working within the context of arts and peace-making, specifically in Bosnia-Herzegovina. The researcher notes that even though his intention was to discover arts interventions within conflict, he mostly found the art being used as a tool to train and facilitate improved relationships between groups post-conflict. He notes that the arts are a *"powerful process for bringing groups together"* (Zelizer, 2003, pg. 71). Zelizer (2003) similar to this research sought to discover the arts used as intervention but also was only able to find arts used post-conflict.

Secondly, Balkrishnan (2017) conducted a study exploring the effectiveness of a Unity through Arts education module and its effectiveness in manifesting unity in a multicultural Malaysian school. The effectiveness of the module was measured through interviews of students who were involved in the module. From the study, the researcher found that the arts activities can help to strengthen the Malaysian identity, unify students, as well as develop their self-expression, critical thinking and appreciation for diversity.

Lee (2013), conducted a case study of the Guernica Peace Mural Project (GPMP), which is an international project with an aim *"to remove separation among nations, races, religions, cultures and people"* (Lee, 2013, pg. 5).This study proved closest to the inclusion criteria, of collaborative art being used as a means of peace-making between conflicting groups. This particular project in Ohio aimed to bring together a group of graduate American students and Somali children. This was as a result of limited interactions between cultures; religious, language and cultural barriers and rampant discrimination and prejudice. The project lasted five days and involved both groups creating a mural together about peace and journeys. The researcher found through interviews and participatory observation that the group art exercise promoted cross cultural understanding, the building of relationships and a greater tolerance of differences. The researchers use the term "bridged bonding" to describe the collaborative art exercise as a means of bonding the two groups as one whole group. This study provides an example of intergroup conflict which is highlighted by the discrimination and prejudice between the American and Somalian groups, an intervention which is a collaborative mural, and the outcome which is greater tolerance and building of relationships. This study also provides an example where a study such as this could be beneficial. In this case, in a student-centred neighbourhood that is nearby a community of Somalians, where exists a fractured relationship between both groups.

Apart from the above-mentioned research, there is little to no empirical research on collaborative arts as a means of intergroup conflict resolution. It is important to note that the research on collaborative arts does show that participating in collaborative arts allows for the facilitation of qualities that would arguably be helpful to facilitate peace-making. However, as mentioned previously, several authors theorize that this approach should be seriously considered. For example, an experiment conducted by Gibbons (2010) incorporated art therapy in the classroom with students from a high-risk neighbourhood, more likely to have been exposed to domestic and neighbourhood violence. Gibbons (2010) notes that students had become more self-aware and cognizant of their personal views and responses as a result of art therapy. The art making supported their individuality as well as their appreciation for the views and perspectives of others. Gibbons (2010) identifies a gap in research and proposes that art therapy can be used as a tool to educate teachers on how to handle conflict resolution between groups of students within the classroom, in light of further research and applications performed on the topic. McNiff (1989) describes the healing power of art. He suggests that art contains the ability to transform pain and conflict into affirmations and well-being. The ability of the arts to allow one to tell the story, as well as listen to the response of another allows for healing to take place. Kent (2013) makes a proposal directly in line to that of the focus of this research. He notes that majority of art-based strategies are used to focus on the individual rather than a collective. He expresses that there is great opportunity within the context of collaborative creating of art. Stephan (2008) would agree as he states that intergroup conflict is a collaborative effort rather than a solely individual experience. Marcow-Speiser and Speiser (2005) also speculate on a similar idea. They believe that art can serve as a plateau of stability for groups, with different backgrounds and experiences, to creatively discover peace and conflict resolution.

Thus far the research has explored group flow and collaborative creating and has began to formulate the theoretical background behind this study. From Lee's study, the reader can see that collaboratively creating in this sense appeared to have facilitated a merging of the two separately identified groups into a whole as a means of their participation in a collaborative creating task. Kim, Suh and Lee (2013) also mention how little deliberation or analysis there is on this type of research and conclude that more research should be done in various contexts and applying different methods of creating together.

Thus far, this literature review has looked at group flow and Collaborative Arts. The review has provided rationale which shows that the arts provide a platform for collaboration and the potential facilitation of Group Flow. Group flow has been shown to facilitate a collective identity. Collaborative arts have also been proven to facilitate a collective, social identity and foster community harmony. Thus far, examining both the concept of group flow and collaborative arts has discussed the idea of a social identity. The literature review has also examined a few studies that observe the application of collaborative art within the context of intergroup conflict. This study focuses on the social identity aspect of collaborating and how this could potentially provide opportunities for reconciliation within the context of intergroup conflict. To further tie together all of the concepts behind this research, the following section will look more deeply within the concept of social identity.

1.4 What is the Social Identity Theory?

The term social identity refers to a person's concept of themselves based on group membership (Tajfel, 1978, 1981). Social identity theory emerged from various studies (Tajfel, 1978, 1981; Tajfel & Turner, 1979, 1986) in an effort to understand the minimal conditions necessary for intergroup conflict to occur. These experiments were called

minimum group paradigm experiments. The authors discovered from the experiments that the awareness of being in a group as opposed to another existing group, is enough to facilitate intergroup discrimination and conflict. To illustrate, in one experiment by Tajfel et al (1971), boys were placed in a group as a result of their preference for one style of art labelled as Klee, as opposed to another, labelled as Kandinski. Participants were then asked to assign money to unknown members of participants who belonged to their own preference group and also to unknown members of the other preference group. Results show that participants took the opportunity to give more points to the group that they identified with rather than the outgroup, even though they did not know anything about the individuals in each group. In this case, a personal preference was enough to allow participants to identify with a group and also show support for perceived in-group members.

In another experiment, Allen and Wilder (1975) separated participants into two groups. In each group, the in-group was made to be perceived as either similar or different in their beliefs or perceptions. Regardless of individual beliefs or perceptions, under each condition the in-group was significantly favoured more than the outgroup, even if members of the outgroup shared similarities with the individual. The minimal group paradigm experiments all placed participants into groups based on the trivial basis of categorization (Diehl, 1990). In a similar experiment, participants were randomly assigned into two groups and simply being told that they would be placed into random groups was enough for them to make decisions based on that group membership (Billig & Tajfel, 1973). Even though the groups were random, it was enough to foster in-group bias.

These experiments portray, as was the goal, the minimal conditions for one to not only identify with a group but also make decisions based on that membership. From the experiments above, being placed in a group with no knowledge of the other group members or any similarities or differences between them, was enough for group members to exhibit a

bias in favour of their own group. These experiments play a role in informing this study's conditions for creating a salience of opposing identities among participants (see more in Methodology section).

The social identity is formed as one cognitively categorizes themselves in response to social stimuli (Diehl, 1990; Tajfel & Wilkes, 1963). In other words, the social identity refers to a person's sense of who they are as a result of perceived group membership (Diehl, 1990; Tajfel & Wilkes, 1963). Illustrated by the experiments above, the boys were placed in two groups. Membership of either group then became a part of their social identity. As a result of identifying themselves with these groups, they then made decisions which suggested in-group favouritism. The Social Identity Theory (SIT) refers to one's understanding of him/herself in relation to others in a group context (Burke, 2006). In other words, people categorize themselves based on social cues.

The Self-Categorization Theory (SCT) posits that people identify or categorize themselves (Tajfel, 1981; Allport 1954;). When this occurs at a social level as a response to social cues and environment, they then form a social identity. This is an important concept for this study, as it is people's understanding of themselves in relation to the other, within a group context, which forms the basis of intergroup conflict. In other words, in order for a conflict to preside between groups, one must identify themselves first within a particular group. Central to SIT is the notion of depersonalization, where people see themselves less as individuals and more as examples of a greater identity along with other group members (Hornsey, 2008). From this perspective, there are two concepts that will be further discussed. The idea of the personal identity and the social identity.

1.4.1   The Personal Identity and the Social Identity

Reiterating the definition above, the Self Categorization Theory posits that people identify and categorize themselves.   Based on the self-categorization theory, a part of developing one's identity is as a consequence of categories that one places himself in. Taking this further, the self-categorization theory provides a premise through which to distinguish the concept of Personal Identity and Social Identity (Hornsey, 2008).

The Personal identity is referred to as categorizations of the self through which the individual is defined uniquely and separately from other people, including other persons who they may identify as a part of a particular in-group (Turner, Oakes, Haslam and McGarty, 1994). In other words, one's personal identity emerges from placing themselves in various categories, all of which constitute the person as an individual. As is mentioned above, the Social Identity is formed as one defines him/herself in response to social stimuli. In other words, the social identity is also a categorization of the self, but as a result of comparison with others which results in group membership and defining contrasts between groups. In both concepts of identity, a cognitive process of categorization takes place. Personal identity develops arguably at an interpersonal level, as it defines one individual in relation to another (Hornsey, 2008). Social identity develops at a group level in which group membership and separation occurs as a result of comparison of the self to a social group and membership of one group as opposed to another.

Rosen, (1978) provides an illustration to distinguish between both concepts. He identifies a table in comparison to furniture and highlights that a social identity is more inclusive in the same way the furniture is more inclusive to other structures, not limited to a table. However, one could argue that the personal identity is what allows or facilitates a social identity, as it is either the acceptance, rejection or some form of change of the personal identity that would allow for a social identity to manifest. In other words, the individual

transforms into a group member as a result of self-categorization which may or may not be a reinforcement of the personal identity.

To illustrate with psychological evidence, Turner and Hogg (1987) conducted an experiment with 60 male and 60 female British students. They hypothesized that under conditions in which both sexes were encountering each other, they would elicit behaviour reinforcing their own self-categorization and self-identifying with that group. The researchers found in favour of the hypothesis that the males and females both behaved in a manner that reinforced stereotypes and behaviours associated with each gender. Placing this in a general context, the individuals undergo the cognitive process of self-categorization and identify themselves as a part of a group. They reinforce their own personal gender identification and engage in behaviours to justify their membership of a group of males. In other words, *I am a man, I belong in a group of males, I will exhibit male-like behaviour.*

The integral role of self-categorization becomes evident, as it is this cognitive process that leads to a personal identity transforming into a social identity, as one must categorize him/herself to belong to a social group. In the minimal group paradigm examples, the researchers placed the participants into two groups. Consequently, the participants adhered to this positioning and self-categorized into the given groups. As a result of this self-categorization, their consequent behaviour was an attempt to benefit their in-group. Also, in Sherifs' Robbers Cave experiment (1954, 1968) which is detailed further below, this self -categorization not only leads to beneficial in-group behaviour, but may also lead to discriminatory outgroup behaviour.

1.4.2   The Self, Self-Consciousness, Personal Identity and Social Identity

From the previous sections, a distinct difference has been highlighted between personal and social identity. Personal identity develops on an individual level as opposed to

social identity which occurs at a group level. Arguably, the personal identity determines group membership which facilitates social identity. With this distinction created, this discussion now aims to compare two concepts previously discussed, the self and self-consciousness and Personal Identity.

To reiterate, previously it has been argued that the self is the same as self-consciousness. The self has been defined as the awareness of one's own consciousness. Thus, the loss of self would imply a loss of one's own consciousness awareness. Hence, a loss of self is a loss of self-consciousness. Moving forward, these concepts will be used interchangeably to mean the same thing. Personal identity is defined as self-categorizations which define the unique individual as separate from others. Is there a difference between personal identity and the self? One could argue that one's personal identity is a part of one's consciousness. Based on Csikszentmihalyi's example of hunger, it is the self that makes decisions on how to respond to feeling hungry, because one is able to identify as being hungry. Based on Hogg and Turner's example, it is the male's personal identity as a man, which facilitates belonging to a social group and consequently facilitates social behaviour based on that group membership. One could argue here that their personal identity as a man is a part of their consciousness. This awareness of their personal identity then facilitates particular choices and behaviour, as is also evident in Csikszentmihaly's hunger example.

If this is this case, then the loss of self-consciousness would then unavoidably facilitate loss of personal identity. However, loss of personal identity does not imply loss of self-consciousness. To illustrate, Breen (2014) conducted a study investigating changes in personal identity among parenting and pregnant women. The author found that participants were able to discuss and identify changes in their own personal identity as a result of becoming a mother. Previous goals, aspirations, values, choices and behaviours had changed into new ones. One could argue that motherhood facilitated the loss of one personal identity

to facilitate a new one. However, the fact that the participants are able to discuss these changes in detail implies that they are indeed aware of the changes. In other words, they maintained awareness of that part of their consciousness even as the changes were taking place. This study portrays that loss of identity does not inherently cause a loss of self. However, from experiments mentioned previously, a loss of self-facilitates a loss or a change in personal identity (Rufi et al., 2016).

To conclude, this section argues that loss of self-consciousness facilitates loss or change in personal identity. Also, personal identity facilitates social identity. Taking this further, Rufi et al., (2016) propose that loss of self-consciousness promotes a loss of personal identity, which is what facilitates a social identity. In other words, one no longer identify themselves as an individual, but as a part of a social identity which encapsulates more people as part of a group.

1.4.3   Loss of Identity

To understand identity and its relevance to this research, it is important to adopt a critical stance. Identity and its relevance within the Social Identity Theory have been previously discussed. In addition, the idea of losing one's identity has negative connotations that should be examined. The loss of identity from a negative standpoint occurs in various contexts. For example, Skaff and Pearlin (1992) conducted a study exploring the loss of identity in a caregiver role. The study found that engulfment in the role along with a lack of social contact facilitated a loss of identity, which lead to low self-esteem and depression. Dugan (2007) conducted a study with victims from Hurricane Katrina and several of the victims who were interviewed described a devastating loss of identity as a result of being removed from their homes, families, routine and day to day

lives. It is important to note that in these cases, the loss of identity refers to a disappearing of the sense of self that has been engulfed by a role or destroyed due to effects of a natural disaster.

Within a group context, the idea of loss of identity is sometimes equated with the concept of de-individuation. According to Diener (1979), deindividuation refers to the loss of self-awareness and personal identity in a group within which there is little to no sense of responsibility for their own behaviour. In other words, loss of identity within a group context places the group as a means of relinquishing all aspects of the self, and as a result there is no self-control of behaviour. To illustrate, Watson (1973) conducted a cross-cultural study which showed that warriors tended to show more aggression if they disguised themselves with paint, allowing for anonymity between group members. Zimbardo (1969) also studied the effects on behaviour of manipulating visible aspects of identity. He conducted two experiments, one with women and one with soldiers. In the experiment with women, he divided them into two groups, one in which their identity was hidden, and found that the women who hid their identity were more willing to shock confederates at various levels of severity for longer intervals than the identifiable group. The study provides evidence for the argument that a loss of identity as a result of anonymity, allows for more aggressive or harmful behaviour toward others. It is important to note that anonymity in this case seems to be the reason behind negative behaviour and loss of sense of responsibility. In a second experiment with soldiers, the soldiers provided more shocks at higher intervals when they were identifiable. Arguably in this case, their identities played a role in more aggressive behaviour rather than a loss of identity.

The Social Identity theory would provide an answer for the increase in shocks by the identifiable soldier. As explained by Turner et al., (1987) individuals do not lose their sense of self but rather shift from the personal to the social. Similarly, as it relates to

57

behaviour, action merely shifts from a personal to social categorization. To illustrate, Breen (2014) conducted a study investigating changes in personal identity among parenting and pregnant women. The author found that participants were able to discuss and identify changes in their own personal identity as a result of becoming a mother. Previous goals, aspirations, values, choices and behaviours had changed into new ones. One could argue that motherhood facilitated the loss of one personal identity to facilitate a new one. However, the fact that the participants are able to discuss these changes in detail implies that they are indeed aware of the changes. In other words, they maintained awareness of that part of their consciousness even as the changes were taking place. Participants also were now able to socially identify with other mothers. This study portrays that loss of identity does not inherently mean a complete disappearing of the identity, but rather a change that incorporates social categorization.

As explained previously, there can be circumstances outside of one's control that allow for a loss of identity on an individual level. However, in the social context, the argument that social identity theory posits, is not a loss of identity in the sense of a disappearing of a sense of self. Rather, a loss of personal identity replaced with an enhanced salience of the social self (Turner et al., 1987; Turner 1991). As described earlier, the personal identity is often the pre-requisite for joining various social groups, whether the joining of that group is in line with or in opposition to the personal identity. In other words this loss of identity is within the context of transitioning rather than disappearing. A closer look at the concept of de-personalization sheds light on this discussion. De-personalization is described as including an increase in the social identity (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). In other words, the personal identity is no longer salient, rather the social identity becomes prominent.

In light of these two positions, one can argue that the idea of losing one's identity appears to have positive as well as negative connotations. The concept of losing one's sense of responsibility to anonymity as described previously has proven to facilitate negative behavior. However, in the context of group formation, Social Identity Theory does not promote anonymity, but rather a sense of transitioning to a new sense of identity inclusive of the in-group. This study builds upon the theory of Social Identity and uses the term loss of identity to mean the transition of the personal identity to include social categories.

1.4.4 Social Identity Theory amidst Intergroup Conflict and Reconcilation Theories

Tajfel and Turner (1979) take the concept of Social Identity Theory further and attempt to identify what takes place after self-identification with a group, that could potentially lead to intergroup conflict. They argue that people have a desire for positive self-concept. In other words, people want to view themselves in a positive light, consequently, they want to view the group with which they identify in a positive light as well. Festinger's Theory of Social Comparison (1954) would imply that in order to come to this perception, one must compare with another. Exporting this idea into a group context, one group must compare with another group. Parallels can be drawn here with Relative Deprivation Theory (Stouffer, Suchman, DeVinney, Star, & Williams, 1949), which is explained in more detail below, in that this social comparison, when it results in one group feeling inferior to another, can lead to negative feelings toward the outgroup, or positive feelings toward the status of the in-group.

Stephan (2008) concurs in his discussion of the concept of social identity, as a central aspect of intergroup conflict. He proposes that intergroup conflicts arise in situations where

the interests of one group are disparate to those of members of another. In other words, the very nature of the conflict depends on how it is construed, understood or perceived within a group identity. As reiterated by Burke (2006), the Social Identity Theory provides a foundational context for in-group formation. The implementation of the social aspect of identifying and comparing with others is the crux of the forming of social groups. Once groups have formed and members have categorized themselves, there are various contexts and reasons why friction between groups occur. As reiterated by Galinsky and Ku (2004) the self is closely linked and interconnected to intergroup perceptions, attitudes and behaviour.

In an attempt to reinforce the importance of Social Identity in intergroup conflict, the following section will discuss, compare and contrast other theories that may be associated with intergroup conflict.

1.4.4.1 The Relative Deprivation Theory

Stouffer's (1949) Relative Deprivation Theory (RDT) discusses the occurrence of groups forming as a result of feeling deprived of what they believe they should have, in comparison to others. This theory emerged from Stouffer's observance of American Soldiers during World War II. Stouffer observes that satisfaction with ones' own position or situation, is relative to other comparable situations that are accessible (Pettigrew 1986; Walker and Smith, 2002). An example to highlight this is his observation of Black American soldiers based in the south, who were more satisfied with their position than Black American soldiers in the north. The paradox is the fact that the South was more immersed in active racism and segregation culture, hence it would be expected that the soldiers in this position would be unsatisfied. However, Stouffer (1949) found that the soldiers in the south compared themselves to the civilians that were in their immediate vicinity and as such were satisfied with their position. RDT then proposes the unsatisfied perspective as a cause for brewing

unfavourable feelings toward an outgroup. In other words, if one feels disadvantaged in comparison to another group within reach of comparison, feelings of resentment, anger and entitlement may occur as a result (Pettigrew, 2015). Smith et al (2012) explains further that in order for Relative Deprivation to take place, the following four psychological processes should occur: (1) cognitive comparisons, (2) cognitive judgments that they or their in-group are at a disadvantage, (3) perceive these disadvantages as unfair, (4) resent these unfair and undeserved disadvantages.

It is important to note that this theory draws on social comparison and position in social structure as a potential basis for intergroup conflict. What is important to be accessed in this case, is a comparable group. To illustrate, in the case of the Black American soldiers, both themselves and the civilians are black members of society susceptible to racism from an "outgroup". However, one group, due to their position, may receive less targeted discriminatory behaviour than the other. The perpetrator in this case neither belongs to the in-group nor the outgroup. It is important to note at this point that the source of the conflict relies on ones' own social identity as belonging to a disadvantaged group due to social comparison.

1.4.4.2 Realistic group Conflict Theory

Sherif's Realistic Group Conflict Theory (1954) argues that when more than one group desires a limited and valued resource, then intergroup competition can lead to negative outcomes – social conflict, group hostilities, and prejudiced attitudes and behaviour (Campbell, 1965). In this case, because there is an external target that both groups want to own, it is perceived that there must be a winner and a loser. This atmosphere facilitates in-group solidarity and negative out group stereotyping and discrimination (Sidanius & Pratto, 1999). Sherif (1954, 1968) conducted a study, which provides evidence to support his theory. This study, known as the Robbers Cave experiment, involved 22 boys, all of which

were 12 years old, white, middle class and protestant coming from a two-parent family. None of the boys knew each other, but were randomly separated into two groups. During the initial phase the groups were unaware of each other's existence and were encouraged to bond as a group, they chose group names and placed them on flags and shirts and engaged in several physical activities along with team-building exercise requiring in-group cooperation. The second phase placed groups in direct competition with each other, wherein groups would engage in various competitions and at the end the winning group would receive various tokens of their victory and the losing team would receive nothing. With the introduction of the competitions the groups began exhibiting negative and aggressive behaviour to the out-group including name-calling, derogatory remarks and burning of the outgroup flags. From this phase of the study, there is evidence to support the theory that competition leads to intergroup conflict. The introduction of a valuable item or resource as in the case of the experiment, provided grounds for aggressive and discriminative behaviour between groups. Though there is some element of social comparison, this theory focuses on competition. In other words it can be argued that knowledge of the resource in demand creates the atmosphere for the conflict, rather than the resource itself.

To compare, the Relative Deprivation theory posits that conflicts arise based on knowledge of the conditions of an accessible group. In this case, the conflict arises based on knowledge of a rare and valuable resource. It is important to note that the knowledge of the presence of the out-group is important, as this is the aspect of competition; however the focus is not on the groups comparing with each other, but rather a heightened sense of belonging and social identity with one's own group and the desire to "win". From Sherif's experiment, the role of the social identity becomes evident even in the initial stages. In order for there to be a conflict between the groups, it was essential for the boys to first identify themselves as group members. The bonding activities, naming of the groups and t-shirts

62

with group names are all activities that strengthened the boys' social identity as members of that particular group.

Again, in this theory the social identity plays a vital role in the context of intergroup conflict. It can be argued, that the presence of the resource heightens the social identity and stimulates the need to be the first to gain that resource. This may then arguably result in a heightened sense of positive self-worth and a sense of pride for belonging to that particular group.

From the above-mentioned theories and studies there are several factors that become evident as reasons for intergroup conflict formation. From the Relative Deprivation Theory, the Realistic Group Conflict theory, reasons such as competition, comparison with accessible groups and maintenance of positive self-concept are evidentially reasons that intergroup conflict occurs. What becomes evident is that social identity plays a major role in these theories. In order for any of these reasons to have any consequence, individuals must first have a social identity that associates them as members of a particular group. This salience of identity, is the focus of this research. One could argue at this point that the Social Identity Theory provides a basis from which stems other formulations and reasons for intergroup conflict. From the other theories, it becomes evident that humans identify themselves based on the groups within which they belong and as such endeavour to ensure the security and well-being of that group which often time result in intergroup conflict. Once a person identifies as a member of a group, the relative deprivation theory and realistic group conflict theory provide reasons why this social identification and group membership can then lead to conflict.

1.4.4.3 Perspective Giving and Taking

Similarly, this idea of identification with group members has been suggested as a means of reconciliation. There are several theories related to reconciliation between

conflicting groups, however one in particular that can be linked to the category of the arts. Perspective giving and taking is a concept that has been allocated to potentially facilitate peaceful reconciliation. Perspective giving, in the context of conflict resolution, may be defined as the opportunity to share one's own perspective or experience with the perceived perpetrators, that form the basis of the inherent conflict (Ugarriza and Nusio, 2016). To illustrate, Ugarizza and Nusio (2016) conducted an experiment with 429 ex-combatants and members of conflict-affected communities in Colombia. Participants were asked to discuss in groups their own ideas and ambitions for a better Colombia. The experimenters found that the participants who were asked to refer their own experience using perspective giving conventions, consistently improved their intergroup attitude toward ex-combatants.

Perspective taking refers to asking participants to take on the role or viewpoint of another. In the case of intergroup conflict, the role of a member of the other group. Bruneau and Saxe (2012) summarize experiments that have successfully used this method to bring about an effective improvement in attitude toward a particular target group outside of the realm of intergroup conflict. In one example, participants are asked to write about the life in the day of an elderly man to come to an understanding of life through another's eyes (Galinsky & Ku, 2004; Galinsky & Moskowitz, 2000).

Bruneau and Saxe (2012) conducted two studies, the first with Mexican and White Immigrants in Arizona and the second with Israelis and Palestinians in the Middle East. The experimenters found that perspective giving is most effective for the non-dominant group and perspective taking is most effective for the dominant group in a changing of attitudes toward the other. It is also important to note that Bruneau and Saxe (2012) discovered that being heard by the other group is a key part of perspective giving.

It is important to note here, specifically in the description of perspective taking, that participants are asked to take on the role of another. One could argue that taking on another's

role could be a similar concept to taking on another's identity, even if only for a moment. In the case of Galinsky and Ku (2004, p. 596), participants were asked to write a narrative of a day in the life of an elderly man after being shown an image of him. They were instructed to *"take the perspective of the photographed individual. That is, go through the typical day in their shoes, as if you were that person."* Arguably, two artistic expressions can be noted here. One being acting, which involves taking on a role and writing in the first person of that identity, and secondly, the act of writing. The results showed that the perspective-taking activity led to a positive rating of the elderly with self-esteem as a possibly variable.

It is interesting to note the similarity between the idea of perspective giving and taking and the previous descriptions of the arts. Perspective taking has been described to allow for a fusion of the self and the other (Davis, Conklin, Smith & Luce, 1996). Tolstoy (1996) describes the experience of art as destroying barriers between people and unifying the artist and receiver. Arguably, the arts are what provide for perspective giving and taking to take place. In other words, the expression of perspective-taking could arguably only take place through an artistic form. This idea will be further explored in the studies that follow.

1.4.4.4 A collective Identity

Ramiah, Hewstone and Schmid (2011) consider Social Identity when discussing reconciliation. They argue that the establishment of a collective identity that supersedes the identity of both groups is the main aim of intergroup conflict resolution. Several authors agree that creating an all-encompassing identity driven by a common goal is central to peaceful reconciliation (Gaertner, Dovidio, Nier, Ward, & Banker, 1999; Gaertner, Mann, Murrell, & Dovidio, 1989; Hayner, 2002). To demonstrate, for example, Gaertner et al., (1999) found that re-categorization induced by a common goal between parties was a significant factor in reducing self-reported bias against the opposing group.

Researchers also stress the importance of focusing on the group rather than the individual identity when deconstructing intergroup conflict (Crocker & Luhtanen, 1990; Worchel & Coutant, 2008). For example, Crocker & Luhtanen, (1990) found that people are very likely to take action to protect their collective identity if they have a very strong social identity within their group. As a result, in order to reduce intergroup conflict, the collective identity must be addressed. Collective identity is defined as an awareness of being a part of an identity shared with other members of the same group. (Bar-Tal, Halperin & De Rivera, 2007; Klandermans & de Weerd, 2000; Mellucci, 1989). In line with this concept is the self-categorization theory, which according to Brown (2000) is both a necessary and sufficient condition for intergroup conflict to occur. Self-categorization theory states that individuals lose their individualism, as the values of the group become their own values (Brown, 2000). It becomes evident at this point the role that identity plays in in-group formation. This study will adapt the concept of a collective identity by introducing a collaborative artistic project that could potentially create a superseding collective identity, thus reducing intergroup bias.

1.5 Addressing the Gap in research to date – A Summary of Proposed Research

A key aim of the research presented here is to address the current gaps that exist with regard to flow as it arises from collaborative arts. In particular the empirical difficulty of measuring flow, as an arguable transient and ephemeral state, is acknowledged. It is hoped that evidence indicative of flow as a potential predictor of wellbeing, identity salience and as experienced reality will emerge from the studies that follow and that future indications for how flow experiences can be measured and recorded will be identified.

Specifically, there is little research exploring group flow within the realm of collaborative arts (Pels, Kleinart & Mennigen, 2018). However, those that do explore

collaborative arts are focused on music (Gaggioli, Chirico, Mazzoni, Milani & Riva, 2015; Gloor, Oster & Fischbach, 2013; Hart & Di Blasi, 2016; Keeler, Roth, Neuser, Spitsbergen, Waters & Vianney, 2015; Macdonald, Byrne & Carlton, 2006; Sawyer, 2006; Zumeta, Basabe, Wlodarczyk, Bobowik & Paez, 2016; Yang, Cheng, Huang & Ren, 2019). One aim of this study is to further investigate the occurrence and measurement of group flow, focusing on visual collaborative arts.

There is also currently little to no research exploring the role of identity within collaborative arts and possible implications for intergroup conflict resolution (Lebaron, 2014; Hyouen Bang, 2016). Currently, perspective giving and taking is a proposed tool of reconciliation between conflicting groups (Galinsky & Ku, 2004; Galinsky & Moskowitz, 2000; Bruneau, Dufour & Saxe, 2012), which arguably, inherently requires artistic expression. This research will further explore this concept through the experience of participants.

Previous research identifies flow as a possible facilitator of a unified identity (Rufi et al, 2016). This provides an opportunity to explore occurrences of group flow within collaborative creating and any experiences of change in identity that this immersion to the task may have allowed for. The occurrence of flow and relationship to identity and collaborative creating is explored qualitatively though the experiences of participants and artists as explained further in the upcoming study chapters.

In sum, this research aims to investigate flow facilitated by creating, collaborative creating in particular, and potential implications on identity, wellbeing and conflict. This study adopts a mixed methods explanatory approach to explore the ephemeral nature of flow as well as collaborative creating. Mixed methods studies are adopted in order gain

a wholesome representation of experiences, clarifying information gained from previous methods and as a means of addressing weak points of one method with another (Venkatesh, Brown & Bala 2013). Triangulation, specifically methodological triangulation in research, refers to the use of mixed methods, through which different modes of analysis may provide a more extensive image of results (Heale & Forbes, 2013). This is particularly useful when investigating flow and group flow, particularly because research that evidences the existence of flow is still in its relative infancy and the empirical challenges in measuring the ephemeral condition of flow is acknowledged. Therefore, it is useful to attempt to measure flow and its role and relationships with other psychological states in a variety of ways which may garner evidence. Howe (2012) describes the use of triangulation, as not prescriptively to determine causal relationships, but rather allows the data to be analysed and observed as a wholesome framework, with the perspective from various angles and sources (such as questionnaires, interviews and semiotic analysis as the research in this thesis will illustrate e.g. see diagram of studies on page 201).Triangulation also offers some clarity and verdancy to research, where one method may answer questions or provide insight that may be otherwise limited or obscured by another (Noble & Heale, 2019).

A potential weakness of triangulation in mixed methods is it can be time-consuming and as a result time management is essential in planning the carrying out of the studies (Noble & Heale, 2019). Strengths of mixed methods designs include adding understanding and insight that may be overlooked with the use of one research method. As a result, a mixed methods approach will be used as a means of investigating the following research objectives:

- To investigate the measurement and occurrence of flow during creating, including collaborative creating.

- To investigate perspective giving and taking during collaborative creating and any potential effects on the occurrence of flow

- To investigate potential implications of flow facilitated by collaborative creating, on identity, conflict and wellbeing

- To investigate, through Interpretive Phenomenological Analysis (IPA) the creating experiences of artists, including collaborative arts; experiences of flow and any implications on conflict, identity and wellbeing.

Chapter 2. Study 1: Collaborative Art vs. Collaborative Task – Measuring the occurrence of Group Flow with the Flow State Scale (Jackson and Marsh, 1996)

2.1 Introduction

As discussed in Chapter 1, there are few studies examining group flow within the artistic realm, and those that do, focus on music (for examples, Gaggioli, Chirico, Mazzoni, Milani & Riva, 2015). Theoretical frameworks within the context of reconciliation between intergroup conflicts, are suggested by researchers to include Perspective Giving and Taking (Galinsky & Ku, 2004; Galinsky & Moskowitz, 2000; Bruneau & Saxe, 2012). Research on Perspective Giving and Taking refers to the participant taking on the role of an opposing participant to come to an understanding of the other's perspective (Galinsky & Ku, 2004; Galinsky & Moskowitz, 2000; Bruneau & Saxe, 2012). Due to the expressive quality of art, arguably art is an ideal platform for perspective giving and taking to take place.

This study examines the occurrence of flow during collaborative creating of visual art and any potential differences of flow in creating as opposed to non - creating tasks. Effects of perspective giving and taking on flow are also investigated.

Study 1 specifically asks the following research questions:

- Do participants enter into group flow as a result of collaborative creating?

- Does collaborative creating provide a context that is more conducive to group flow as opposed to a non-artistic task?

- Does Perspective Giving and Taking, which requires consciously taking on another's identity, have any effect on flow?

There are alternative perspectives in existing literature regarding the most appropriate measures of flow (See section 1.2.3). However, the most common method that has been employed is the Flow State Scale (Magyarodi et al, 2013; Martin & Jackson, 2008; Bakker, Oerlemans, Demerouti, Slot & Ali, 2011; Gaggioli, Mazzoni, Milani & Riva, 2015; Gaggiolio, Chirico, Mazzoni, Milani & Riva, 2015; Heyne, Pavlas & Salas, 2011; Kaye, 2016) and therefore, the current study adopted this measure as a starting point. A quantitative measure is also appropriate and convenient to compare flow between conditions, thus allowing a comparison between a creating and non-creating condition, as well as any potential effects on flow with the application of Perspective Giving and Taking.

With this in mind, this first study aims to explore the connection of these concepts with the following hypotheses:

1. Flow scores will be significantly higher in the creating condition as opposed to the non-creating condition

2. The Perspective Giving and Taking Variable will facilitate more flow than the non-Perspective Giving and Taking conditions

2.2 Methodology

2.2.1 Design

This study adopts an independent group (between subjects) design. The independent variables are Perspective Giving and Taking and type of collaborative activity (artistic vs. non-artistic). The dependent variable is the flow scores on the Flow State Scale.

2.2.2 Participants

38 participants were recruited using posters placed around the campus (See Appendix B) and with Participation Invitation Letters (See Appendix C) that were sent via email to the potential participants. Students were approached with Participation Letters in communal areas such as the libraries, lobbies and cafes. Ideally, the researcher would have recruited 12 participants in each condition at a time. However, during recruitment the challenge of engaging 12 students at a time emerged and in order to continue moving forward with the study, smaller groups of students were recruited at a time under each condition as outlined below.

Table 1. Participant Information – Number of participants per group

Sub-groups	Condition 1 Creating Only	Condition 2 Creating + Perspective Giving and Taking	Condition 3 Collaborative Activity Only	Condition 4 Collaborative Activity + Perspective Giving and Taking
1	4 ps	4 ps	8 ps	3 ps
2	5 ps	3 ps	3 ps	4 ps
3		4 ps		

University of Salford students were chosen as a convenience sample as the researcher is a student of the University. Students were randomly allocated to each condition (as described below) but were placed in opposing groups within each condition based on their answers to a revised version of the European Social Survey - Attitudes to Immigration Questionnaire (Appendix D).

2.2.3 Materials

2.2.3.4 Creating Materials

Materials for collaborative artistic creation, for example paper, paint, markers and any other material chosen by the participants that are accessible by the researcher.

2.2.3.5 An Amendment of the European Social Survey Section D1-D33 – Attitudes to Immigration Scale (Appendix D)

This survey was only given to participants as a means of separating them into groups. The study took place during the period of the EU Referendum, as a result, discussions on immigration were prevalent in the media, thus the attitudes to immigration scale was considered to be an appropriate means of separating into groups. To illustrate, one question on the survey asks, "Are some cultures better than others or are all cultures equal? Participants would respond choosing either:

1. Some cultures are better than others, or
2. All cultures are equal.

Based on their response, participants were places in groups with others who had the same answer.

2.2.3.6 Flow State Scale (Appendix E)

The Flow State Scale (Jackson & Marsh, 1996) is a 36 item measure, which measures flow across 9 subscales that coincide with Czikszentmihalyi's conditions for flow and what occurs while one is in flow. The table below reiterates the constructs for flow in line with the Flow State Scale and provides example questions for each subscale.

Table 1. Constructs of the Flow State Scale

Constructs	Definition	Sample Questions
Challenge – Skill Balance (CHAL)	Balance between demands of the task and the skill of the participant	I was challenged, but I believed my skills would allow me to meet the challenge
Action-Awareness Merging (ACT)	Involvement becomes so immersed that actions begin to feel automatic	Things just seemed to be happening automatically
Clear Goals (GOAL)	Feeling certain about the task	I knew clearly what I wanted to do
Unambiguous Feedback (FDBK)	Clear and immediate feedback	It was really clear to me how my performance was going
Concentration on the Task at Hand (CONC)	Feeling very focussed	My attention was focused entirely on what I was doing
Sense of Control (CONT)	Feeling as though one is in control without conscious effort	I had a sense of control over what I was doing
Loss of Self-Consciousness (LOSS)	Thoughts or concerns about the self, vanish as the participant is immersed in the activity	I was not concerned with what others may have been thinking of me
Transformation of Time (TRAN)	Feeling of time passing more quickly, more slowly, lack of awareness that time is passing.	The way time passed seemed to be different from normal
Autotelic Experience (ENJY)	Csikszentmihalyi (1990) describes this as the end result of being in flow, a feeling of doing something for its own sake, with no expectation of future reward or benefit.	I really enjoyed the experience

Participants answered each question on a Likert scale from 1 (strongly disagree) to 5 (strongly agree). Cronbach's alpha was high at .94 for the 36 items of the Flow State scale showing that the scale was internally consistent.

2.2.4 Procedure

Stage 1 – Screening

Upon expressing interest, students were issued an Attitudes to Immigration Scale (Appendix D) via email along with the Informed Consent form (Appendix F and G) and Participant Information Sheet (Appendix H and I) at least 24 hours before the study. In order to allow for polarity in attitudes and or beliefs, one question was chosen from the questionnaire where students have polarized answers (See section 2.2.3.5) and participants would be placed in groups based on their answers.

Stage 2 – Writing of perspectives with the in-group

Participants met in a classroom on Salford University Campus. They were separated into two rooms with students in the same group based on their answers. Students were asked to then write an account of their perspective and why they hold that perspective along with their in-group members. Crocker & Luhtanen, (1990) express the importance of a collective identity. The aim of this section was for isolated communication between groups to build a sense of community. This was to allow for a heightened salience for their identification with membership of an opposing group, which is a pre-requisite and arguable first stage in inter-group conflict (Tajfel, 1978, 1981; Tajfel & Turner, 1979, 1986).

Stage 3 – Experimental Conditions

Participants were separated under four different conditions. The information below details the number of participants in each condition.

Condition 1: Collaborative Creating

(n = 6)

In this condition, participants were asked to collaboratively create a work of art together under the topic of Immigration. Participants were instructed to choose their own medium individually, for example writing a poem or drawing, and collectively plan and create a

collective work of art. According to Krensky and Steffen (2009) one of the most important factors of community creating is empowerment. One of the avenues of achieving this empowerment is the freedom of choice with regard to aspects such as the theme and the medium. It may also increase a sense of commitment and ownership when participants maintain control over choosing the medium (Krensky and Steffen, 2008). Also, one of the conditions of flow is a task that appears attainable, though challenging. Choosing a medium allows for the participants to use a medium that they feel confident enough to create with. (Csikszentmihalyi, 1998).

Condition 2: Collaborative Creating + Perspective Giving and Taking

(n = 8)

In this condition, participants exchanged and discussed their written accounts with the opposing group. The purpose of this was for each group to come to an understanding of the perspective of the other group in a non-confronting environment. After reading the accounts of the opposing group, students were asked to collectively create a work of art together. The group was instructed to express through the artwork, the perspective of the other group, based on the account they had read and discussed. This model is similar to the draw and write technique (Backett-Milburn & McKie, 2009) in which participants were asked to view an image or video and draw how they think the character being portrayed is feeling. In this study however, participants used a medium of their own choice and were asked to express specifically the perspective of the opposing team. More specifically, each person artistically expressed the views of the opposing team through the medium they chose, in a collaborative piece.

Condition 3: Collaborative Task

(n = 10)

In this condition, students completed the collaborative task with the instructions as follows:

"You are all stranded together on a remote island. You have each brought one tool with you on this island. Choose your tool and write it down on a piece of paper. Now as a group, write a list of ten ways you can survive on this island, collaboratively using your tools".

Condition 4: Collaborative Task + Perspective Giving and Taking (n = 6)

Seven students exchanged and discussed their perspectives with members of the opposing team. Both groups then collectively completed the same collaborative task as detailed in Condition 3.

Stage 4 – Post Measures

Each participant was administered The Flow State Scale.

Stage 5 – Semi – Structured Interviews and Thematic Analysis

The following study, Study 2, will provide details of semi-structured interviews of participants that were analysed using Thematic Analysis, following this study.

2.3 Results

It is important to note that a total of 8 participants did not complete the entire Flow State Scale. It appears that the participants did not see that last page of the scale and only completed the first page. As a result, 8 of the questionnaires were omitted, leaving a sample of N = 30.

2.3.1 Preliminary analysis

According to Jackson and Eklund (2004), if participants scores on the Flow State scale are at or above the middle of the 5-point Likert scale, this is indicative of participants

experiencing the flow dimensions. The highest possible score on the scale is 180 and the lowest possible score is 36. Based on Jackson and Eklund's description, to be in flow, participants scores would range between 108 – 180. The range of flow scores in each condition is as follows:

Condition	Range of scores	Mean
Collaborative Creating Only	85 – 139	122.33
Collaborative Creating + Perspective Giving and Taking	106 -153	134.88
Collaborative Activity Only	117 - 176	140.50
Collaborative Activity + Perspective Giving and Taking	104 -159	128.67

The highest range of scores are in the Collaborative Only activity and the lowest range are in the Collaborative Creating Only. Overall, 26 of 30 participants entered the range of scores indicating flow. 1 participant in the Creating Only condition (score of 85) , 2 in the Collaborative Creating + Perspective Giving and Taking condition (scores of 107 and 106), and 1 in the Collaborative Activity + Perspective Giving and Taking condition (104) did not reach the threshold for flow as describes by Jackson and Eklund (2004).

2.3.2 Flow and flow subscales across all four conditions

Shapiro-Wilk tests were mostly not significantly skewed for each condition as shown in Appendix J (significant results are highlighted in bold). Histograms however showed large departures from normality (See Appendix L), the latter constituting decisive evidence for non-normality (Field, 2013). Descriptive Statistics are highlighted in Appendix K. Therefore, a (non-parametric) Kruskal-Wallis test was used to test the hypothesis that flow and flow subscales would differ across the four conditions. Kruskal Wallis Test results are displayed in Table 5 below.

Table 2. Results from Kruskal Wallis Test for Flow and Flow constructs across 4 conditions

Result from Kruskal Wallis Test	Statistic
No significant difference in Flow Sum across the 4 conditions	$H(3) = 2.44, p = 0.49$
No significant difference in Action Awareness Merging (ACTSUM) across the 4 conditions	$H(3) = 1.15, p = 0.77$
No significant difference in Challenge Skill Balance (CHALSUM) across the 4 conditions	$H(3) = 2.60, p = 0.46$
No significant difference in Concentration on Task (CONTSUM) across the 4 conditions	$H(3) = 6.21, p = 0.10$

No significant difference in Paradox of Control (CONTSUM) across the 4 conditions	$H(3) = 2.91, p = 0.41$
No significant difference in Unambiguous Feedback (FDBKSUM) across the 4 conditions	$H(3) = 5.42, p = 0.14$
No significant difference in Clear Goals (GOALSUM) across the 4 conditions	$H(3) = 6.46, p = 0.09$
No significant difference in Loss of Self-Consciousness (LOSSSUM) across the 4 conditions	$H(3) = 4.60, p = 0.20$
No significant difference in Transformation of Time (TRANSUM) across the 4 conditions	$H(3) = 1.17, p = 0.76$
No significant difference in Autotelic Experience (ENJYSUM) across the 4 conditions	$H(3) = 2.00, p = 0.58$

Therefore, the hypothesis that both creating conditions would lead to greater flow than the two activity conditions was not supported (See Appendix L for SPSS Output). To examine

80

further, a Mann-Whitney U Test was carried out to observe any differences in Flow specifically in the creating conditions as opposed to the non-creating conditions. Results from the Mann-Whitney Tests are detailed in the Table below.

Table 3. Mann Whitney results across Creating vs Non-Creating conditions

Result from Mann-Whitney Test across Creating versus Non-Creating conditions	Statistic
No significant difference in Flow Sum across the 2 conditions	U=130.50, p = 0.45
No significant difference in Action Awareness Merging (ACTSUM) across the 2 conditions	U=120.00, p = 0.76
No significant difference in Challenge Skill Balance (CHALSUM) across the 2 conditions	U=137.00, p = 0.31
No significant difference in Concentration on Task (CONCSUM) across the 2 conditions	U=133.00, p = 0.40

No significant difference in Paradox of Control (CONTSUM) across the 2 conditions	U=132.50, p = 0.40
No significant difference in Unambiguous Feedback (FDBKSUM) across the 2 conditions	U=130.50, p = 0.45
There is a significant difference in Clear Goals (GOALSUM) across the 2 conditions	**U=169.00, p = 0.02**
No significant difference in Loss of Self-Consciousness (LOSSSUM) across the 2 conditions	U=137.00, p = 0.31
No significant difference in Transformation of Time (TRANSUM) across the 2 conditions	U=95.50, p = 0.50
No significant difference in Autotelic Experience (ENJYSUM) across the 2 conditions	U=102.50, p = 0.70

The hypothesis that flow scores would be higher in the creating conditions as opposed to non-creating conditions was not supported. Moreover, the score for Clear Goals was significantly higher in the non-creating task (p = 0.02).

To test whether the variable of Perspective Giving and Taking had any effect on flow, a Mann-Whitney U Test was carried out across Perspective Giving and Taking versus non-Perspective Giving and Taking conditions. The results are detailed in the table below.

Table 4. Mann Whitney Results across Perspective Giving and Taking versus Non-Perspective Giving and Taking conditions

Result from Mann-Whitney Test across Perspective Giving and Taking versus Non-Perspective Giving and Taking conditions	**Statistic**
No significant difference in Flow Sum across the 2 conditions	U=106.50, p = 0.82
No significant difference in Action Awareness Merging (ACTSUM) across the 2 conditions	U=96.50, p = 0.53
No significant difference in Challenge Skill Balance (CHALSUM) across the 2 conditions	U=127.00, p = 0.55

No significant difference in Concentration on Task (CONCSUM) across the 2 conditions	U=106.50, p = 0.82
No significant difference in Paradox of Control (CONTSUM) across the 2 conditions	U=103.00, p = 0.73
No significant difference in Unambiguous Feedback (FDBKSUM) across the 2 conditions	U=112.50, p = 1.00
No significant difference in Clear Goals (GOALSUM) across the 2 conditions	U=110.00, p = 0.95
No significant difference in Loss of Self-Consciousness (LOSSSUM) across the 4 conditions	U=90.50, p = 0.38
No significant difference in Transformation of Time (TRANSUM) across the 4 conditions	U=102.00, p = 0.70

No significant difference in Autotelic Experience (ENJYSUM) across the 4 conditions	U=115.50, p = 0.89

There is no significant difference in flow conditions across the Perspective Giving and Taking and Non-Perspective Giving and Taking conditions as detailed above.

2.4 Discussion

This section will discuss the results in line with the objectives of the study outlined in the Introduction.

2.4.1 Do participants enter into Group Flow as a result of collaborative creating?

The preliminary analysis of raw flow state scores, in line with Jackson and Ecklund's (2004) parameters for flow, would provide some evidence that majority of the participants entered flow across all conditions with the exception of 4 participants as detailed in section 2.3.1. Participants appear to have entered flow in both creating conditions with the exception of 3 participants. Previous research on group flow within the arts focus on music (for example Hart & Di Blasi, 2016). This research provides some evidence that group flow was taking place within collaborative creating of visual art.

It is important to acknowledge that some researchers, for example Armstrong (2008) would possibly argue that the use of the Flow State Scale provides information in individual flow as opposed to the group occurrence of flow. Other researchers highlight the importance of measuring flow at an individual level in a group setting (Hart & Blasé, 2016; Gloor, Oster & Fischbach, 2013). This study uses the Flow State Scale in a group

setting to measure the individual's level of flow during collaborative creating. There are limitations however, using this quantitative measure in this setting. There is no clear determinant from the Flow State Scale, as to whether there was any cohesiveness of participants or whether they all entered flow at the same time. Other ephemeral qualities of group flow such as blending of egos and communication with others, is also not captured via this method. As a starting point, this study is therefore able to provide some evidence of flow potentially occurring in a collaborative creating setting which was one of the objectives.

2.4.2 Does collaborative creating provide a context that is more conducive to Group Flow as opposed to a non-artistic task?

The results from this study, do not provide clear evidence that collaborative creating is more conducive to flow as opposed to non-artistic task. Previous studies highlight the occurrence of group flow in both artistic (Gaggioli, Chirico, Mazzoni, Milani & Riva, 2015; Gloor, Oster & Fischbach, 2013; Hart & Blasé, 2016) and non-artistic tasks (Walker (2010); Rufi, Wlordarczyk, Paez, Javaloy, 2016). What is missing from previous studies is the investigation of flow in a collaborative context with visual arts as the task. This study, finds no significant difference in the level of flow reported when participants undertake a collaborative artistic task as opposed to a non-artistic task.

It is also noteworthy that the Clear Goals dimension provided a significantly higher score in the non-artistic task as opposed to the artistic task condition. This indicates that participants appeared to feel more certain about the non-creating task as opposed to the creating task. This may be because some participants did not consider themselves artists, so the instruction to create may have caused some feelings of uncertainty. More specifically, creating from the other's perspective could also facilitate feelings of

uncertainty in participants who do not regularly take on the role/viewpoints of others. In spite of this uncertainty, all participants managed to complete each creating task. This will be explored further in Study 3, which is a semiotic analysis of the artwork procured in each condition.

According to Pels and Menigan (2019) group flow has previously been measured using observation and interview methods from the researcher, within which qualities such as cohesiveness and blending of egos were established. According to Csikszentmihalyi (1992) too much emphasis should not be placed on any empirical measure of flow, so as not to minimize the experience by reducing it to scores on a questionnaire. Similarly, in a previous study, using a similar variation of the Flow State Scale, Keeler, Roth, Neuser, Spitsbergen, Waters, & Vianney, (2015) discovered no difference across conditions. They measured levels of flow looking at improvised singing as well as structured singing. It could be argued that there needs to be more of a qualitative exploration to find any differences that the Flow state scale may not be able to deduce, particularly given the transient nature of flow (Csikszentmihalyi, 1998). Perhaps the reduction of flow to a questionnaire, limits the study's potential to fully explore any potential differences in the experience of flow within the conditions, and thus should be explored qualitatively.

2.4.3   Does Perspective Giving and Taking, which requires consciously taking on another's identity, have any effect on Flow?

The results also show that Perspective Giving and Taking had no significant effect on Flow State Scores. Though the potential effect of this variable will be further explored in the upcoming studies, it is interesting to note that there is no effect on flow indicated from this first study. Previous studies show that flow facilitates a blending of identity with the group and social unification (Zumeta et al, 2016). Rufi et al (2016) also discovered that

flow, positive emotions, loss of self-consciousness, and social identity indicators correlate positively. Perspective Giving and Taking is an intentional task to take on the identity of what is the perceived "other" group and express their views as if they are one's own. Flow on the other hand, facilitates a group identity based on communal participation on a task (Rufi et al., 2016). In both cases, the task facilitates the change in identity, while in the perspective giving and taking condition, the change in identity is intentional. This expression of the other's perspective appears to have no effect on the immersion in the collaborative task.

2.5 Limitations

The results of the study show no difference across conditions, but one limitation could be the fact that the occurrence of flow itself is inherently ephemeral and hence difficult to measure, particularly, perhaps quantitatively. It should therefore be acknowledged that the Flow State Scale might have provided an additional limitation in this case, especially in capturing any group phenomena that may be associated with flow. It is also important to note that the study was underpowered as a result of low participant numbers. However, this study provided a starting point with which to engage with measuring group flow.

As is evident in the participant information section, there were some groups that were smaller than others. In some instances, this could not be helped, as participants would choose not to show up. In other cases, sub-groups were formed due to more availability on some days than on others. In the future, greater care could be taken to announce fixed dates and recruit more than enough participants on each day to ensure an equal number across conditions.

There is potentially an argument that in the creating conditions, there is more room for perspective giving and taking to take place. Participants are instructed to create from

the other's perspective. In the non-creating conditions, it is not possible to complete the task from the other's perspective in the same way that the creating condition allows. This may be considered a limitation. On the other hand, this particular aspect of the study highlights a characteristic of creating that is not possible in a standard collaborative activity. In the non-creating condition, participants are able to give and take perspectives, but a collaborative activity does not allow for an expression of the other's perspective outside of a discussion. The creating condition allows for that expression to take place through the artwork. In line with Bang (2016), the arts arguably have an inherent quality of providing a platform for an exchange of perspectives to take place.

2.6 Conclusion

Overall, this study provides some evidence of collaborative creating as a means of facilitating flow, although certain ephemeral aspects associated with group flow are not captured by the Flow State Scale. Collaborative creating is highlighted in this study as a more appropriate medium for Perspective Giving and taking, and participants are able to collaborate, while also taking on the viewpoint of the opposing group. This intentional taking on of a new perspective, however, does not appear to have any effect on Flow State scores.

Implications of this study include further insights into art as means of facilitating flow, extended into the realm of visual arts. Future research could further explore the measurement of group flow, adopting more qualitative measures that could more suitably provide additional information in a collaborative setting.

Study 2 aims to further explore the occurrence and experience of flow, through semi-structured interviews of the participants in this study. The following chapter will explain in further detail.

Chapter 3. Study 2: Exploring collaborative creating and group flow in groups of opposing, salient identities: A Thematic Analysis

3.1 Introduction

The previous study found no significant difference in a quantitative measure of Flow across conditions. However, it is important to take into consideration the advice of Csikszentmihalyi (1992), the conceptualizer of flow, in that an over-riding emphasis should not be placed on a quantitative measure of flow, as this could be seen to minimize the lived experience of flow which makes it the phenomenon it arguably is. It is intended that this study will delve deeper into exploring the occurrence and actual experience of group flow by conducting a thematic analysis of interviews of the participants from each condition of the study.

Thus, through the use of semi-structured interviews, this research aims to explore the experiences of the participants, to gain an understanding of their experiences of collaborative creating, the presence of group flow and identity salience. The following research questions will be explored;

1. Did participants experience the perception or feeling of heightened group identity?

2. Are there any instances in which participants testimonies made their condition particularly relevant?

3. Did the collaborative creating activity facilitate the experience of group flow or any aspects of group flow?

4. Did the collaborative creating activity facilitate a change among participants that affected how they identified with each other?

3.2 Methodology

3.2.1 Design

This is a qualitative study, employing thematic analysis of semi-structured interviews. This qualitative approach was chosen as means of further exploring the experiences of participants, to gain any insights on their experiences of creating, as well as any experiences of group flow that may not have been captured through the Flow State Scale (Jackson & Marsh 1996) in the previous study.

3.2.2 Participants

8 participants from Study 1, were randomly chosen for one on one semi-structured interviews. Two students from each condition and four from each identified group. The table below outlines the 8 participants who participated in the semi-structured interviews and pseudonyms are used for anonymity purposes.

Table 6: Participant Information from Semi-structured interviews

Condition 1 Creating Only	Condition 2 Creating + Perspective Giving and Taking	Condition 3 Activity Only	Condition 4 Activity + Perspective Giving and Taking
Daniel	Greg	Nardia	Kate
Lisa	Albert	Aaron	Michael

3.2.3 Materials

The only material used specific to this study was a recording device to capture the semi-structured interviews.

3.2.4 Method/Procedure

After the sessions, participants were asked whether they would like to take part in a semi-structured interview for further research. Participants who agreed, met with the researcher on agreed upon dates and times in a classroom or meeting space on campus.

Participants were asked questions such as, "How did you feel while you were creating", "What part of the process stood out for you the most and why?" "How did you feel while writing down your own point of view?" (See Appendix M for Semi-Structured Interview Guide Questions). The data collected from the interviews was collated and analysed (See Appendix N) for Example Interview Transcript) according to the steps below outlined by Braun and Clarke (2006):

(i)   Familiarizing with the data: The first step required transcribing of the data procured from the observations and the interviews, reading and making note of any initial ideas.

(ii)   Generating initial codes: Patterns and interesting features were coded systematically, and data was organized in relevance to each code.

(iii)   Searching for themes: Codes were then organized into themes, and data was collated according to each theme

(iv)   Reviewing the themes: The connections between coded extracts and themes was reviewed

(v)   Defining and naming themes: The themes were refined, procuring a narrative told by the analysis and providing clear definitions of each theme

(vi)   Producing the report: Vivid examples were selected to highlight the themes and the analysis then related to research questions and literature.

3.3 Results

3.3.1 Thematic Analysis of Interviews

The themes occurring through the thematic analysis of the interviews and observational data will be detailed below according to each condition. Overall, the six themes (See full list of codes and sub themes in Appendix O) that emerged are:

-   Initial negative feelings and assumptions toward the out-group

- Comfort with the initial in-group

- Sense of responsibility/respect for all

- Need to express

- Unity/Togetherness

- Change in feelings/atmosphere

The following will highlight each theme with a few specific quotes from the participants to highlight how each theme was derived from each condition:

3.3.1.1 Initial negative feelings/assumptions toward outgroup

This theme was derived from participants descriptions of their feelings toward the opposing group at the beginning of the study once placed in their groups according to their opinions.

Participants describe this negativity across all conditions in different ways as highlighted below:

"*In the beginning, yes, [there were negative feelings], because we basically had our opinions and it's natural, thinking that we had a difference of opinion." (Greg, Condition 1)*

Daniel uses the term sceptical and Lisa highlights assumptions that were made about the other before meeting them.

"*...I might have been a bit sceptical, so I guess if scepticism is somewhat negative..." (Daniel, Condition 2)*

"*So...it was very easy for me to be presuming things about them, especially having not spoken to them or seen them yet [...] that was very easy, to base my opinions on just them going against mine..." (Lisa, Condition 2)*

Michael and Kate provide evidence of both negative feelings as well as negative assumptions about the other group from their testimony.

"I feel like that's the kind of set way you should think about it because we are all taught to think everything equal. So it just seemed like a very linear way of thinking…" (Michael, Condition 3)

"I genuinely thought that at first whoever was to come into the room was going to be quite ignorant to the fact that there is diversity in the world…" (Kate, Condition 4)

Kate's negative feelings continued into the beginning of the exercise:

[…] to me they weren't thinking correctly and they weren't thinking appropriate tools, they weren't being realistic…" (Kate, Condition 4)

Nardia and Aaron are also both explicit with their expressions but describe the feelings as *angry* and *under pressure*

"I would say that the bit that stood out was when we were, what's the word, split into two groups […] I instantly felt kind of like angry toward them" (Nardia, Condition 3)

"…so anybody would be under a little bit of pressure straight away because you are separating the two groups" (Aaron, Condition 4)

Though expressed in different ways, across each condition there is evidence that participants experienced an initial sense of negativity and/or made initial judgements and presumptions about the "other".

3.3.1.2 Comfort with the initial in-group

This theme outlines how participants felt toward their initial in-group. Participants across conditions expressed a comfort with the groups that they were separated into, even though in most cases they had just met their in-group members for the first time.

"I was in a group with someone who shared the same opinion with me, so yeah, I was comfortable, I could talk about it a lot easier" (Greg, Condition 1)

"It was nice, it was good because I was basically putting my point across and then he put his point across, and we got to realising that we had a lot in common about the subject

94

matter we were discussing, so it was a lot easier to talk to someone who has the same views…" (Daniel, Condition 2)

For Lisa, not only does she feel comfortable with her in-group, but she expressed that she even felt more separated and against the out-group as a result of ease of discussion and solidification of views.

So, then it was a good thing to be with someone else and then be, like, "Oh, maybe, because of this," and then be, like, "Oh, yeah." It was good to bounce ideas off one another and then it almost solidifies your views […] If anything, it more sets you against the other people because you were, like, "I definitely still think this." (Lisa, Condition 2)

Kate and Nardia also describe an ease and comfort as they discuss with their in-group.

"It was good because, obviously, you're straight away put into a situation where you've got something similar to discuss so it was easy to talk to that person straight away, and there was no confrontational air about us. We were both, we straight away had something to agree on, we both straight away had something to talk about that we felt exactly the same about, and then, it felt easier for ideas to come out…"(Kate, Condition 3)

"...As soon as we got split it was an instant feeling, I was like, I just felt so close to, I forgot his name, but he was in the same group with me. I felt really close to him and I was like, "oh, they don't understand us", instantly being in a group…" (Nardia, Condition 3)

Evidently, all participants were comfortable and some participants even go further to describe a closeness with the in-group that they were separated into.

3.3.1.3 Sense of responsibility/respect for all

Participants describe a sense of responsibility in ensuring that whatever is presented at the end of the task is representative of a group effort as opposed to an individual effort. Greg and Albert highlight this in their accounts:

"… it was like I felt okay because I was trying to still reflect my own opinion, while capturing those opinions, it wasn't totally my idea, the drawing was also something that had been picked from everyone[…]so I had to at least create something, because at that point it's not just me, it's me in the midst of people."(Greg, Condition 1)

"To be honest, I can't remember what I wrote now but I suppose the bit I remember is trying to find a way to work everyone else's opinions into…summarise the discussion in the haiku."(Albert, Condition 1)

Daniel also expresses his inclination to translate his group members' words into a creation. In other words, he felt responsible for encapsulating their discussion through his artwork, ensuring that they were represented:

"But the drawing itself, I felt like I was trying to listen because they were talking about hands lifting people up. So, I was trying to like, when they were verbally expressing it, I was trying to then turn that into some kind of creation." (Daniel, Condition 2)

Michael draws a comparison with how he would have completed the task as an individual, versus how he actually completed the task with the acknowledgement of team members:

"Yeah I mean…I mean we completed the task, that's the main thing. If I had those three tools on my own I would have made probably a pretty different…a lot of the things would have been the same but I think I would have changed a few things […]But then again, I realise we were working as a team so it has got to…so no I wouldn't…I am happy with how it went yeah." (Michael, Condition 3).

Nardia's account also solidifies this theme as she explicitly observes the respect that was present for everyone:

"The most meaningful part of the study was the fact that they respected everyone, I mean, we all respected everyone. When I said my point, playing chess, no one laughed, they went like, 'okay, we're going to stay saying do this'. We all had mutual respect, no one was left

out, even if someone was quiet we would appreciate his idea. I like that feeling, I

mean."(Nardia, Condition 4)

Across all conditions there is a sense of responsibility and respect for all participants input

to be a part of the final product.

3.3.1.4 Need to express

This theme was procured from participants describing a need to express their perspectives

or viewpoint to the other group. Though this theme is evident across all conditions, there

appears to be a satisfaction of this need in the creating conditions as opposed to the non-

creating conditions.

Greg provides evidence of this need in his account:

"Maybe it's just, yeah initially, everybody just wanted to see why they thought what they

thought, […], and trying to understand their perspectives […] You remember at some

point you even had to wade in to stop us because we kept… it became an interesting

discussion, it wasn't an argument."(Greg, Condition 1)

Albert also echoes this sentiment:

"…I think we wanted to get that off our chests and make sure we were all…you know, we

are not necessarily in a disagreement with each other but to explain our positions […] it

was good to have that explanation. I think we needed to have that chat as a

group."(Albert, Condition 1)

Lisa provides a potential reason why the creating conditions seem to satisfy the need that

she felt to express to the other group:

"I think through the art, it allowed you to express yourself a lot better […] if you couldn't

say anything about it, you could show them…" (Lisa, Condition 2).

The last two non-creating conditions also show a need to express but it becomes evident that this need remained after the study was over. Kate and Michael both highlight this in their accounts:

"Yeah maybe if we did the thing and then afterwards we had a little discussion about it. Like why we thought this way and whatnot […] yeah I did feel like I wanted to talk about it […]I thought we were going to be able to discuss so yeah I did want to like, say something to him afterwards"(Michael, Condition 3)

"…I wouldn't have challenged them but I would have wanted them to see my point of view as well because, if we're talking about diversity we're also talking about everyone's opinions, and everyone's opinion matters, no one's right or wrong. But I would have really wanted them to see that it's a true and given fact that I could literally pull up statistical evidence on this to prove my facts."(Kate, Condition 3)

Both Kate and Michael portray that they would have wanted to express their perspectives to the other, that this need is still there after the study. Aaron and Nardia also portray the same ideas:

"I think if there could have been a discussion period or as a group we discussed our differing views."

"[I would have wanted to] explain why I presented that viewpoint in the first place" (Aaron, Condition, 4)

Nardia not only talks about her need to express, but she took it a step further and went ahead and spoke to one of the participants after the study to try and satisfy this need. Even though in her condition, participants wrote down their views and exchanged them she explains that personal conversation provided a more accurate idea of the participants' perceptions:

"…I would want to know because they seemed so nice, why do they think we're not equal, who are they talking about, because just having the paper there with our opinions, it's like reading the news, you never know what exactly the person meant, what tone of voice, or what they know…"

Interviewer: "Yes, so it was valuable then to be able to, because this was after the study as you guys were leaving, it was valuable to you to be able to talk about it?"

"It was, I felt a lot better, yeah"(Nardia, Condition 4)

It is important to note the difference across conditions in that the creating condition appeared to facilitate a satisfaction of the need to express, however the non-creating conditions still felt a need to express even after the study is completed.

3.3.1.5 Change in Feelings/Atmosphere

Participants across conditions express that there was a change in their feelings toward the opposing group and/or the atmosphere. The results also show that this change varies between the creating conditions and the non-creating conditions.

From the creating conditions, Albert and Lisa explicitly detail a positive change in feelings toward the other group.

"I think we were more relaxed at the end of the session…because we had done the task and there was no more difficulty with trying to imagine what we were going to do and we had got over any kind of potential disagreement between the two groups of two…"(Albert, Condition 1).

"So, then it was good that we began to agree on how to do the art together, how to express each other's views through that. So, then we agreed on all of that kind of thing. So, the awkwardness began to leave…"(Lisa, Condition 2).

Though Michael also expresses a change, for him, the change is neither positive or negative, but rather *different*.

"I guess just communicating with them, instantly made me feel different. So even if we had sat down and chatted about football, see I would have felt differently. I did feel differently. Not any better or any worse, I just felt like I knew them better… so I guess I felt more like I was able to make a judgement […] but it wasn't bad or good; it was just what I had kind of gathered."(Michael, Condition 3)

Below, Nadia does not express any difference in feelings throughout the entire study. However, at the end of the study she explains that she did feel peaceful toward the other group, but this had nothing to do with the collaborative activity. Through her own initiative, Nardia approached the other group to discuss their perspectives on the topic.

" At first I was like yeah, violent, angry and all this and then I was like…I actually feel peaceful toward them..."

I: **After the activity?**

R: Yeah.

I: **So, what part of it do you think made you feel more peaceful towards them? Where do you think that came in?**

R: Well, it was a part that wasn't in the study, because you know when I asked, "can I ask a question in the end… well the girl was like, when we finished, "what was your question"? And I was like, "well you put down that some cultures like to hurt others, who were you talking about"? Because I just find it so narrow-minded. It made me angry when I read it, and she was like, "well, I was talking about Nazis", and I was like, "okay, you view culture different than I do […]So, then it was all disappeared, I was like, "okay, I understand what you mean now" (Nardia, Condition 4).

The creating conditions very distinctively portray a positive change in feelings toward the other group, however in the non-creating conditions, this distinctive positive change is not evident.

3.3.1.6 Unity/Togetherness

Participants describes a sense of unity amongst the collective group after participating in the creating condition. This theme provides the greatest difference between conditions as it is only evident in the creating conditions. The examples below provide strong evidence of the themes as participants express in their own words the unity that they felt with each other.

Greg describes the artwork as facilitating friendliness amongst all the participants.

The collaborative work we did eventually, regardless of our opinions and our differences and everything, we were able to come up and do something, that forced out some kind of friendliness, more or less, so at the end of the day we became comfortable with each other. (Greg, Condition 1)

Albert takes this further, and describes the artwork as facilitating a merging of the groups into one. He draws a distinction between how they began as separated and how they left as one unit.

"I think the task probably facilitated a kind of merging together as one big group, rather than two pairs. There were four of us weren't there? […]When we entered the room we were two pairs. When we left the room, we were a group of four" (Albert Condition 1)

Daniel describes a collective feeling of accomplishment and in his own words describes a bond between participants as they left the study.

"... I can tell everyone seemed, I don't know what the feeling was but everyone had a good feeling when we were leaving, like we'd accomplished something, we'd done something somewhat meaningful [...] we all walked down the hall together so that's a representation of kind of bond, isn't it?"(Daniel, Condition 2)

Lisa describes a sense of togetherness during the creating process and explains that the creating of the art facilitated the participants supporting each other.

"...we were, kind of, supporting each other through our terrible art together." (Lisa, Condition 2)

Though participants use different terms to describe their experiences, it is very evident that creating together facilitated not just a sense of peace, but a sense of unity and togetherness between participants. Participants also explicitly attribute this feeling of unity as a result of creating the artwork together.

3.4 Discussion

In order to allow for a clearly flowing narrative, the discussion section will answer the research questions using the themes and analyse these themes according to previous literature.

3.4.1 Did participants experience the perception or feeling of heightened group identity?

A key part of this study, is the importance of establishing whether or not participants were able to develop a sense of heightened identity with their in-group. This is the group of people that chose the same answer to a question chosen from the Attitude to Immigration Questionnaire (See Appendix D). From the literature review Social Identity is developed by identifying as a part of a group.

There are two themes which emerged from the Thematic analysis that provide direct answers to whether the participants experience of salience of identity. These themes are *initial negative feelings toward the outgroup* and *comfort with the in-group*.

Firstly, the theme *initial negative feelings toward outgroup* in and of itself identifies an "outgroup", another group that is present that one present group does not belong to. In addition to that, negative feelings were added as a part of this theme, as across conditions, participants feelings toward the other group were largely negative. The use of words such as *skepticism, anger* and *pressure* portray negativity felt toward the perceived other. This finding gives merit to the minimal group paradigm as a foundation. Though the minimal group paradigm requires less to facilitate discrimination between groups (Diehl,1990), it provides a clear direction. In this case, separation based on one's own beliefs proved to facilitate negative feelings toward the other as is evident through the testimony of the participants. Dovidio and Gaertner, (2010) describe prejudice as a negative evaluation of a person based on the group of which they are a perceived member. From both Nadia and Lisa's account there is evidence of this as they express feelings of anger and animosity toward the other group.

This theme also provides evidence of participants identifying themselves to belong to an in-group, opposing an identified outgroup. Nadia states "*...I instantly felt angry toward them*". She makes a clear distinction between herself and *them.* In line with the Social Identity Theory (Tajfel, 1978, 1982; Tajfel & Turner 1986), participants, when separated into groups, identified themselves as a part of that group. Furthermore, as a result of this new identity, identified themselves in opposition to the *other*.

Prejudice refers to making an assessment of a person based on their group membership (Brown, 2010). From Katrina, Lisa and Daniels' assessment it becomes clear that they all made judgements on the other participants based on group membership. For

103

example Katrina highlights that, "*I genuinely thought that at first, whoever was to come into that room was going to be either quite ignorant to the fact that there is diversity in the world".* Before even meeting the other group, she had formed an assessment of the other.

Though similar to the previous theme, *sense of comfort with the in/group* shows an opposite feeling to members of the in-group. Participants describe an ease or a good feeling to be able to be in a group with people with whom they share the same opinion. One participant, Lisa, also took this further to say that being able to talk to someone who shares the same opinion also made her feel even more divided, separate and against the other group. Lisa's account follows suit with Allen and Wilder's (1975) experiment within which participants were significantly more favorable toward members of the in-group. This also falls in line with results from Billing and Tajfel (1973) in which being placed in random groups was enough to foster in-group bias.

It is important at this time to highlight that these themes provide some evidence of negative feelings toward the identified "other". Separation into groups allowed participants to not only feel connected to people they had not met before, but also to foster negative feelings toward the perceived outgroup.

3.4.2 Are there any instances in which participants testimonies made their condition particularly relevant?

Though the theme *need to express* is evident across conditions, it is interesting to note the differences between conditions. In both creating conditions this theme is evident. However, participants appeared to have satisfied this need during the creating process while discussing and creating with the other group. In the non-creating conditions however, participants express that they had a desire to discuss the perspectives with the other group. Michael explains that he wanted to talk as he thought the other group may have had a bad opinion of him. The theme need to express can be aligned with the literature regarding self-

esteem and self-perception. Galinsky and Ku, (2004) relate that creating and understanding one's own self-concept leads to assessments being made. In this case, Michael is making an assessment of the other group's potential perception of him and this drives a need for him to explain or justify his perception to the other. Nardia provides an example of this. Nardia explains in her interview that after the study she spoke to another one of the group members to understand their opinion. She explains that this need carried on throughout the task and afterward she was glad to have been able to speak to the other group member to understand her answer. This discussion left her feeling better. There is no evidence to show that this discussion brought them closer or allowed them to feel unified, but rather to some extent allowed her to say what was on her mind.

In the creating conditions, there is also a need to express portrayed that seemed to have been satisfied. The leads to the question as to whether or not the art in fact had a role to play in providing a relief for that need. McNiff (1989) defined art as the souls' expressive language. In other words, art is as a means of expression by definition. If this is the case, this provides an explanation as to why the creating conditions allowed for this need to be satisfied. Lisa's account also sheds light on this as she says that the art allowed them to express themselves much better, in that what couldn't be expressed with words, could be expressed through the artwork. From the literature review, several researchers would agree with Lisa that art allows clients to discover and express verbally, feelings that they find difficult to express verbally (Ferszt, Hayes, DeFedele, & Horn 2004; Gladding, 2005; Malchiodi, 1999, 2003). Thus, a sharing of perspectives was facilitated through this means.

The theme *change in feelings/atmosphere* also provides some differences across the creating versus non-creating conditions. In the creating conditions, there is a distinct description of a positive change in feelings or atmosphere. For example, Albert describes everyone feeling more relaxed and Lisa describes the awkwardness leaving and the

atmosphere feeling nicer. Michael however, describes feeling different, but the difference neither being positive or negative. Rather, he expresses being better able to make a judgment. Nadia explains that the difference in the way she felt had nothing to do with the collaborative activity, but rather after the study had ended, being able to discuss with the other group allowed her to gain a level of understanding. This finding is in line with Ferszt et al, 2004 which concluded that creating together facilitates an atmosphere in which incarcerated women felt more and more comfortable as they were creating their work in the same space. McNiff (1989) also placed an importance on the atmosphere that art creates and deems it giving asylum to the soul. This could provide an explanation for the positive change in feelings observed in the creating conditions, as art potentially providing a safe space for all the participants involved.

3.4.3 Did the collaborative creating activity facilitate a change among participants that affected how they identified with each other?

The last three themes procured from this study shed some light in response to this research question and will be discussed below.

The theme *sense of responsibility/respect* was derived as participants expressed feeling responsible for ensuring that what was created was a reflection of not just themselves individually, but of everyone involved. In the creating condition, Greg explains that he was focused on the task, so as to ensure that what he was procuring was representative of everyone in the group. The Social Identity Theory provides a theoretical framework for this behavior. To reiterate, the SIT refers to one's understanding of him/herself in relation to others in a group context (Burke, 2006). From Greg's explanation there is evidence of him identifying himself as a part of a group and this is reflected in his creating. Similarly, in the non-creating condition, we also see Michael expressing that he would have done things

differently if he was doing the task on his own, however he was aware that this was a team effort and thus acted accordingly. It is also important to note here that this theme in particular, is opposite to the idea of de-individuation (Diener, 1979), which involved a loss of personal identity that leads to a lack of accountability and sense of responsibility. In this case, the participants identification as a part of a group created a sense of group responsibility for the outcome of their shared efforts.

It is important to note that the sense of responsibility was evident across all conditions. Karina also mentions she would have liked to see more out of the opposing group and believed that overall the project could have been much better if they got the best effort out of everyone. It is important to note that a sense of responsibility, respect and acknowledgment of other group members is not equivalent to unity or peace. From Karina's account there is evidence that it is possible to respect everyone's input, but this may not have an effect of feeling close, peaceful or unified with a conflicting group.

The theme *Unity/Togetherness* was procured very strongly in both creating conditions and is not evident in the other conditions. This theme in particular provides a visible difference. In both creating conditions, participants describe friendliness, a bond, starting as two separate groups and leaving as one group. There are very clear indicators of a unified bond being shared between all participants that took part in both creating exercises. This theme is also shared in the analysis of the artwork where symbolism of peace and unity are evident in both conditions and is described further below.

A potential reason for no evidence of this theme in the non-creating conditions may be attributed to the escapism route as outlined by Heitler (1990). In line with this route, the collaborative activity may have just provided a temporary distraction from the issue. According to Labrecque et al (2011), escapism allows for a temporary relief of social realities but does not address conflict. Rather, the issues are buried under another task or

behaviour. In this case, participants may have been momentarily distracted by the task, but the issues were not resolved and as a result they may not have felt unified with their opposing groups.

According to the testimony of the artists as discussed previously, art destroys the separation between artist and receiver (Tolstoy, 1897). In this case, it appears that art also destroys the separation between artist and artist when there is collaborative work involved. This destruction of the separation seems to be aided with the instruction of perspective giving and taking, though both conditions eventually appear to not only collaborate, but procure themes of unity. Bukowski (2008) defines art with the ability to destroy concepts and replace them with new truths. This is very evident across both conditions. Participants began the exercise in two separate groups in two different positions and were able to "destroy" those concepts that initially began with and replace them with a new perspective that involved the merging of perspectives. McNiff (1989) describes art as a sanctuary for the soul where transformation can take place. From the data collected, both conditions of creating provided a platform that allowed participants to not only discover perspectives but express and create new perspectives which provided a sense of unity between all participants at the end of the study.

Loewen (2012) views art as a framework or manifestation through which to study how one perceives and expresses his/her own identity. If this is the case, the artwork procures evidence of the participants viewing themselves as a unified group. The theoretical framework established Flow as a potential medium through which one can lose the personal identity and regain a new overarching identity. However, this study separates the arts and Flow and places creating art itself as a route through which to facilitate a sense of unity and unified identity between creators. Though there appears a difference between the perspective giving and taking conditions, there is still at the end of the exercise, symbolism leading to

understanding oneself within a broader spectrum of humanity. Loewen (2012) explains that through art, one brings out the best in himself, and the sense of humanity or rather the sense of understanding of oneself as a part of a greater collective of humans, becomes greater. This study provides evidence in line with Loewen's statement of what can be facilitated through the arts.

The role of the social identity is also very evident from this theme in that participants identify themselves now as belonging to a greater group encapsulating the previously separated groups. The identity does not disappear, but in line with Tolstoy (1996), Bukowski (2008) and Mcniff (1989), transforms to include all participants which is embellished by a sense of unity.

3.4.4 Did participants collaboratively creating together experience Group Flow or elements of Group Flow?

Some of the aspects of group flow (Sawyer, 2015) can be related to the themes derived from participants testimonies. Firstly, Sawyer (2015) describes close listening to all group members, equal participation and communication with group members as aspects of being in group flow. These aspects can all be related to the theme *sense of responsibility and respect for all*. Participants describe the importance of ensuring that everyone's voice was heard, and the importance of including everyone's participation. Secondly, Sawyer's descriptions of flow include a balance between control and flexibility, which may also be considered a derivative of the theme *sense of responsibility*, in that there was some level of releasing some control to other group members to ensure that everyone was able to exert some control into the final outcome of work. Thirdly, the theme unity, specific to the creating condition, can be related to the element of blending of egos as described by Sawyer (2015). Sawyer (2015) specifically describes this as a tangible consequence of being in

group flow that is also at times an observable quality. Sawyer (2015, p. 39) describes this as *"a magical moment when it all comes together, when the group is insync"*. Participants testimonies of working together on the artwork not only demonstrate a cohesiveness on the artwork, but with each other. In this case, participants are able to describe a merging together into one group as a contrast to being previously separated by thoughts and ideas. Collaborative creating specifically, facilitated this occurrence. It is also interesting to note that participants very specifically attribute this merging to the artistic task.

3.5 Limitations

Limitations of this study may include the fact that these interviews were taken after the study on dates and times suitable to the participants. As a result, participants had to rely on their memories of the events and may have forgotten some aspects. Participants however were made aware that they would be asked to participate in an interview and most registered interest right after participating. No interview took place more than two weeks after participation. Arguably, it would be useful in the future to have the interviews right after the study, however in this case, participants had a chance to reflect on the study and give their views in hindsight of what occurred which can be considered valuable.

3.6 Conclusion

The study's aims to build on the previous study and answer the aforementioned research questions provided some new insights that were not provided in the previous quantitative study. There is evidence provided from the testimony of participants of a unified identity after creating together, that was specific to the creating condition as opposed to the activity. This provides a suggestion that art as a medium for collaboration, procures a sense of unity that may not necessarily be the case in other non-art collaborative activities. This is not to say that there may be other activities that have the same effect, but rather it provides some

evidence toward the consideration of art as a primary tool for a merging of identities, particularly where they may be some form of intergroup conflict.

There are also some examples of group flow in a collaborative creating setting, which is an area that is very limited in current research. It is important to note that the blending of egos consequence of being in flow can be related to the unity theme procured from the participants, which gives some suggestion that it is the blending of egos element of group flow that could potentially be the facilitator of the overarching identity that appeared to be facilitated in this study.

The study also provides valuable insights into differences in conditions, and strengthens the argument of art as a means of expression, which was a need satisfied in the creating condition as opposed to the non-creating condition. There is also evidence that shows that collaborating procures a sense of responsibility for others involved, though this may not necessarily coincide with a sense of unity.

Chapter 4. Study 3: A semiotic analysis of the artwork in a context of opposing, salient identities

4.1 Introduction

In the studies reported in the previous chapters (and specifically in Conditions 1 and Condition 2 of Study 1), the participants collaboratively create together. As a result, each group procured a work of art in the conditions detailed below.

- Condition 1 – Group Creating Only

- Condition 2 – Group Creating + Perspective Giving and Taking

This third study aims to further explore the experiences of collaborative creating, with more of a focus on the artwork itself, to observe any patterns or useful information that the artwork can provide to give light to the concept of collaborative creating in a context of salient group identities. In order to do this, this study will employ arts-based research to explore the phenomenon of collaborative creating using semiotic analysis as an exploratory tool. Dunn and Mellor (2017) explain that this form and methodology allows for new approaches and perspectives to be explored. In this case, the perspectives of the participants can be ascertained from a different angle, through the analysis of what they have created. According to Jones and Leavy, (2004), arts-based research is research that involves creative arts as part of the methodology, whether in data collection, interpretation or analysis. Arguably, certain symbolic and emotional aspects of one's experience may not be easily accessible through traditional methods of data analysis (Dunn & Mellor, 2017). Specifically, within the category of conflict resolution, arts-based methods offer an environment for topics such as social identity and conflict that may not be as easy to verbalize in some cases (Cohenmiller, 2018; Coemans & Hannes, 2017). As a result, this study aims to explore the artwork procured under the above mentioned two conditions using semiotic analysis. This study will perform an analysis similar to that of Ibrahim (2017), who similarly use semiotic analysis to

explore meaning behind images, focusing on a particular context. The focus of this research is to explore the visual expressions of participants within the context of salient opposing identities.

4.2 Methodology

4.2.1 Design

This is a qualitative study, using semiotic analysis to explore meaning behind images created by participants in Study 1. Semiotic analysis is a method used to decode and understand images within a particular context. According to Gillian (2012), as it relates to finding symbolism within images, due to the subjective nature of interpretation, analysis can be considered an endless exercise. As a result in the case of semiotic analysis, the particular context provides the parameters for analysis and the researchers discussion of the symbols, fall in line with what the research aims to find out. In this case, as discussed in the Introduction, this research aims to investigate any representation of salience of identity that may have occurred in the artwork. As a result, the analysis will focus on symbolism that relates to the research question.

4.2.2 Participants

A total of 20 University of Salford students engaged in creating artwork across the two conditions. The table below outlines the number of participants in each condition.

Table 4. Participants for Study 3

Condition	Number of Participants
Group Creating + Perspective Giving and Taking	11
Group Creating Only	9

4.2.3 Procedure

The creations procured in the above-mentioned studies were analysed using Semiotic Analysis to give an understanding of any signs or symbols procured that may also provide some insight to the experiences of the participants. Semiology is the study of signs and symbols and serves to provide analysis exploring the meaning behind these signs and symbols (Gillian, 2012). According to Gillian (2012) semiology is a *critical visual methodology* that is mainly focused on social differences and how these are expressed through symbolism. Also, semiology concentrates on detailed studies of a small number of images as the focus remains on the analysis of the art in a particular context or setting, rather than an aim to generalize (Gillian, 2012). As this study is exploring group creating under different social contexts, semiotic analysis is considered appropriate. Two works of art from each condition will be analysed. The following steps were taken in conducting the semiotic analysis of the artwork procured from the study (Gillian, 2012):

- Identifying the symbols/signs are:

For this stage, the researcher engaged in the artwork. Within both studies, only visual artwork was procured as participants all chose to create visual art. Once engaged with the art, the researcher then identified the symbols. It is important to note that the researcher was present during the creation of the artwork. Participants own descriptions of what they created was also included in this analysis. The research aim assisted in identifying and reporting the relevant symbolism.

- Identifying what the symbols/signs signify:

Once the symbols were identified, they were then discussed in line with the research question.

- Consider how they relate to other symbols/signs.

The researcher then highlighted how each symbol related to the other symbols within that specific condition, whether any parallels could be drawn, as well as any differences or disconnections and what this may imply.

- Explore their connections to wider systems of meaning.

Connections in line with the theoretical framework and literature review are reviewed in the discussion section in order to address the research aim.

4.3 Results

For each condition, this section will first identify what the symbols are, identify what the symbols signify, then consider how they relate to other symbols and signs within that condition.

4.3.1 Condition 1 – Group 1 - Creating Only

Table 5. Participants from Group 1 in the Creating Only Condition

Condition	Number of Participants in this group	Media
Group Creating Only *Some cultures are better than others vs. all cultures are equal*	4	Poetry, Drawing, Digital Photography

Image 1: Final collaborative artwork from Group 1 Condition 1

4.3.1.1 Identifying the symbols

The above image is the final completed image procured by the group in this condition. This image portrays a man with various features. He is wearing a sari on one side and a tie and shirt on the other. His face shows different features, long and short hair, red and brown lips and a face mark practiced by some cultures. The speech bubble depicts a haiku coming from the lips of the man stating

"Who is the migrant?
Views depend on perspective
Cultures can coalesce"

While identifying the symbols, it is important to note that within this condition, which was Group Creating Only, that the art presented in this condition allowed for a longer more definitive creating process before completing the final product. It is important to note that this final image was as a result of a process of images created by the group to finally come this piece. These images are shown in Appendix P. This process itself is being identified as a symbol to be explained further in the following section

4.3.1.2 Identifying what the symbols signify

The kurta on one side and a tie and shirt on the other, represents different types of dress that are worn by different cultures. The kurta, is traditional clothing typically worn in the Indian culture, and a suit and tie is somewhat representative of Western culture traditional wear. The long and short hair and the red and brown lips highlight the various different physical characteristics of humans. On one side of the man's face, there is a face mark. This face mark represents particular customs and practices that various different cultures ascribe to. It is notable that the face mark is on one cheek of the face. Similarly, the cheek with no mark highlights a difference in cultural practices by means of comparison to the other cheek. It is important to note that in this case the participants deliberately drew the image of one man, to maintain that at the root of all the differences, we are all linked together by our humanity.

The words of the haiku also help to provide some explanation of the symbolism in the artwork, even as a symbol itself. The poem portrays that the idea of migrant is subjective and can change based on perspective. The final sentence in the haiku, "*Cultures can coalesce*", portray the idea that it is possible for humanity to come together as one, while still acknowledging the differences.

4.3.2 Condition 1 – Group 2 - Creating Only

Table 6. Participants from Group 2 in the Creating Only Condition

Condition	Number of Participants in this group	Media
Group Creating Only *Allow many unskilled labourers to come and live here vs. Allow no unskilled labourers to come and live here*	5	Drawing
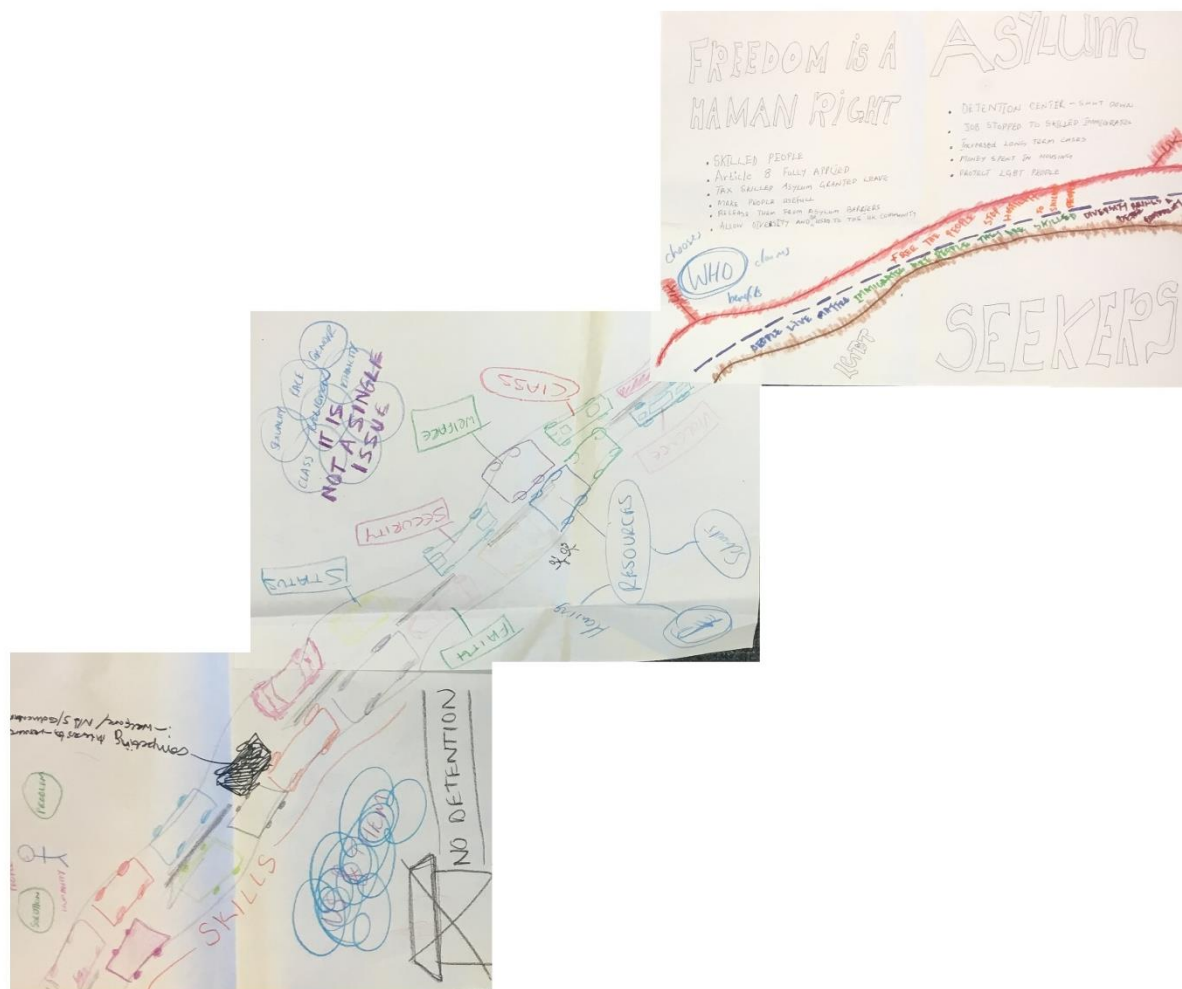
4.3.2.1 Identifying the symbols

The image above portrays a road with several words and cars appearing to be stuck in traffic. There are several positions and ideas highlighted on the artwork. On one side is the perspective of one participant portraying a rejection of detention centres for refugees. On another side one participant highlights freedom as a human right. A few of the cars have been labelled with different titles namely status, security, faith and class and remain unmoving in a street traffic jam.

There is great importance however to highlight the final small image in the corner of the artwork. This image is the last image that was created and included the input of all participants. A close-up of the image is provided below.

This image shows a man in the centre of two circles labelled problem and solution with the solution circle surrounded by the words people and humanity. Though a very small image, this image was the final image that held all participants input. This will be discussed further in the next section.

4.3.2.2 Identifying what the symbols signify

The cars appear to be stuck in traffic. This arguably represents a traffic jam of thoughts, concepts and ideologies among the participants. It is interesting to note that each car is given a different colour also representing differences in perspectives. The culmination of all of these ideas on paper procures a representation of confusion, lack of movement and differing perspectives. Though a very small image in comparison to the entire image, the man in the centre of two circles was the final image procured with the input of the entire

group. This image represents the consensus of the group that the oneness of people and humanity provides the solution to all the problems highlighted by the other images in the artwork. The man placed in the middle of the words problems and solutions portray that even though humans may be the cause initially, humans are also the solution.

3.4.5   Considering how symbols from Condition 1 relate to each other

It is interesting to note that there is clear symbolism within both groups of the importance of the human identity. In both pieces the human identity is provided as the source of unity and the solution to issues that may present themselves due to differences in perspectives or ideas. Both conditions however, through the artwork, also portray a process to getting to that final theme. Both conditions portray individual perspectives coming out on the canvas first, before coming to a final collective, consensus piece. The implications of these ideas will be discussed further in the discussion section.

4.3.4 Condition 2 – Group Creating + Perspective Giving and Taking

Table 7. Participants from Group 1 in the Creating + Perspective Giving and Taking Condition

Condition	Number of Participants in this group	Media
Group Creating + Perspective Giving and Taking *Some cultures are better than others versus all cultures are equal*	4	Drawing

Image 4: Collaborative artwork from Group 1 Condition 2

4.3.3.1 Identifying the symbols

The drawing shows people of different colours holding hands around the globe. There are also three thought bubbles portraying different perspectives on different issues. One thought bubble portrays a happy elderly woman and a sad elderly man. The second bubble shows a woman smiling and dressed to go to work, next to a woman with a sad expression, with a bruise on one side of her face and tears falling from her eyes. The third bubble portrays a dog positioned upright with a bone in his mouth, next to another dog with exes on his eyes that shows that the dog has died.

4.3.3.2 Identifying what the symbols signify

The first thought bubble portrays a happy elderly woman and a sad elderly man representing some cultures mistreating the elderly and some appreciating the elderly. The second portrays women being empowered in contrast to women being abused. The third thought bubble shows animals being well taken care of in contrast to animals being abused. Each though t bubble is coming from one of the people holding hands around the globe. The thought bubbles highlight the differences in cultures and cultural practices around the world, that are considered negative, positive, acceptable or non-acceptable, depending on the perspectives.

The use of colour in this case is used in the thought bubbles to highlight that some cultures can have both agreeable and disagreeable ways of life. In spite of this, the people holding hands portrays the idea that regardless of colour, or perspective, the common theme between humans is humanity and this fact unites us. There is also the use of the globe to represent the common home for humans on this earth.

It is important to note on this point that this one sheet of paper and the image portrayed here is one cohesive effort from all members of the group, as opposed to a process of several individual images before the final piece as portrayed previously.

4.3.5 Condition 2 – Group Creating + Perspective Giving and Taking

Table 8. Participants from Group 2 in the Creating + Perspective Giving and Taking Condition

Condition	Number of Participants in this group	Media
Group Creating + Perspective Giving and Taking *Some cultures are better than others versus all cultures are equal*	4	Drawing

Image 5: Collaborative artwork from Group 2 Condition 2

4.3.4.1 Identifying the symbols

The image above portrays the earth. Outside of the earth are words written in the colours black and red. These words include manipulation, punishment, bigotry, animal abuse, oppression etc. Inside the earth, the word peace is written in blue in various languages. Images inside the earth include music notes, a knife and fork, and an open book. There is also a balanced scale, shaking hands, a ying yang symbol and a flag with rainbow colours.

4.3.4.2 Identifying what the symbols signify

The word peace is written in various languages inside the world to portray peace and unity among people from all different nations and tongues. Music notes, knife and fork, the book and other symbols represent various aspects of different cultures that they are known for and celebrated. The handshake with different colour hands, Ying yang symbol and a flag with rainbow colours all represent all represent how differences within people can bring them together and often complement each other.

123

In contrast to these symbols, the words written in black and red are placed outside the world to represent a world free from any instances of what has been written. In other words, issues such as racism, homophobia, animal abuse, bigotry and extremism belong outside of earth, or outside of where humans live. In other words, this image in its entirety represents a peaceful world where differences are celebrated, and any abuse of these difference in a negative way should remain outside of the world.

4.3.6 Considering how symbols from Condition 2 relate to each other

Within this condition, both creations utilized a representation of the earth and both creations provided symbols of unity. It is interesting to note that the first image in this condition portrayed people of different colours holding hands to portray peace in spite of differences along with unity. The second image did note portray people, but instead used the word peace in various different languages to portray the same theme of peace and unity. It is interesting to note as well that both images portrayed contrasting ideas in similar ways. The use of colour is used in the first image to show differences of perspectives. For example, empowered women going to work as opposed to the abuse of women is portrayed in different colours to portray different perspectives. Similarly, in the second image, words such as homophobia, racism and conflict are written in black and red and portrayed outside of the earth in contrast to the word peace written in blue portrayed within the earth.

It is important to note also the presentation of the artwork. In both conditions, one sheet of paper is used and the resulting image is a culmination of all artists in one collaborative piece. This portrays a contrast with condition 1, in which there is more of a definitive process before the final piece is reached. The following section will discuss these symbols and themes further in connection to previous research.

3.5 Discussion

The results show that the creating conditions, inclusive of perspective giving and taking, produced symbols of unity, peace and inclusivity. The creating conditions with no perspective giving and taking also procure signs and symbols of unity and inclusivity. The difference between these two conditions is evident in the process to get to the final stage. The perspective giving and taking variable appears to make a difference in the process of coming to that theme. In the non-perspective giving and taking task, participants procure several images and themes reflecting their own perspective before coming to the final creation. However, in the perspective giving and taking task, participants appear to create themes of peace and unity more easily and cohesively.

Ugarizza and Nusio's (2016) experiment shows that perspective giving allowed for an improvement of intergroup attitudes. Perspective taking, taking on the viewpoint of another, has also been proven to provide an improvement in attitude toward the outgroup (Bruneau & Saxe, 2012). The instruction to create from the other's perspective allows for a more unified creating process from the beginning of the exercise straight through to the end.

In the non-perspective giving and taking conditions, the artwork procured gives the observer a physical illustration of the process of identity formation that collaborative art arguably facilitates. The results in the previous study highlight that participants experience a salience of identity in the beginning of the experiment. Both works of art in the creating only condition, portray different perspectives coming out on the canvas in the beginning of the exercise. Through the process of creating however, in both works of art, not only was a cohesive idea inclusive of the theme of unity procured, but these was clearly visible in the production of a cohesive image. Bukowski (2008) also discusses breaking down old truths and replacing them with new truths. This idea is also portrayed as once opposing identities

and perspectives have been replaced through merging, these concepts in the artwork. Kohut (1980) also provides theory that justifies the findings of this research. He postulates that art creates an avenue for understanding the emotions of other humans. His illustration of Kafka articulating the various psychological states of other humans is very similar to the participants in this case using the art to articulate the perspective of the out-group.

Similarly, previous research has found that collaborative creating in general has positive effects such as the development of a collective identity (Bublitz, Rank-Christman, Cortada, Madzharov, Patrick, Peracchio, et al, 2019). This previous research has been in the context of a community of individual identities feeling more connected as a community. In the case of this study, a context of two salient identities is provided to procure a similar result of a collective identity coming through in the cohesive artwork.

3.6 Conclusion

As mentioned in the literature review Zelizer (2003, pg. 71) that the arts are a *"powerful process for bringing groups together".* The two conditions of perspective giving and taking and non-perspective giving and taking, provide a context through which the researcher can physically observe the process of the development of a collective salience of identity. Exchanging of perspectives before creating allows for a more direct expression of a cohesive work of art. However, the creating only condition portrays the arts can also be a means of expressing the initial personal perspective within a group setting as a part of the creative process before reaching the final goal of a collective piece that is representative of all participants.

As mentioned in the Introduction, certain symbolic and emotional aspects of one's experience may not be easily accessible through traditional methods of data analysis (Dunn & Mellor, 2017). This becomes evident in this series of studies. The reflection and analysis of this visual data provides perspectives of the participants that were not accessible through

the quantitative analysis, while at the same time adding more context and information to the qualitative analysis. Arts-based methods, as mentioned previously, offer an environment for topics such as social identity and conflict that may not be as easy to verbalize in some cases (Cohenmiller, 2018; Coemans & Hannes, 2017). This study uses the artwork as a further method of understanding the collaborative creating experience of the participants in a context where initially, their social identities were identified to opposing perspectives. This study provided a different angle on the data analysed in Study 1 and Study 2.

Thus far, three different methods of analysis have been used to explore flow in a context of opposing salient identities. Study 1 highlights the difficulties that are associated with using the flow state scale to study the phenomenon, particularly at a group level. Though there is some evidence to suggest the presence of flow, there are certain aspects of group flow that are not measureable this way and can be attributed to the ephemeral nature of flow itself. The thematic analysis provides information from participants which can be directly related to being in flow. Their descriptions of the experiences, particularly in the creating group, suggests that collaborative creating in particular, accounts for feelings of unity which was not detailed by participants in the non-creating conditions. These feelings of unity are directly in line with Sawyers (2015) descriptions of "blending of egos". The semiotic analysis, corroborates the testimonies of participants in the creating conditions, and highlights very vivid themes of peace and humanity as an overarching group in which all people belong to. Arguably, the artwork may be described as a physical outcome of the "blending of egos" of the participants and highlights their feelings of togetherness that they described in the interviews.

As mentioned at the end of Chapter 1, one of the aims of this thesis is to also investigate any potential implications group flow may have on wellbeing. As mentioned before, the Flow State Scale allowed for certain shortcomings with regard to the

127

measurement of flow. The following study will explore this in more detail, using the Short

Stress Scale as a validating variable, but also as a means of exploring any relationship

between flow and stress.

Chapter 5. Study 4: Investigating flow in individual and collaborating creating and its relationship to stress

5.1 Introduction

This study aims to further explore the quantitative measure of flow using the Flow State Scale (Jackson & Marsh, 1996). As mentioned in the literature review, stress has similar characteristics to flow in that they both involve a high involvement in a task, great mental effort and are both inclusive of a challenging task (Keller, 2016). Stress has also been associated positively with flow, such that flow could possibly be implicated as a potential factor in overall wellbeing (Peifer et al., 2014, 2015, 2019; Tozman et al., 2015, 2017). Researchers have also found that being in flow facilitates forgetting stress or negative thoughts (Reynolds & Prior, 2006). This study will seek to measure stress before and after a creative art activity and will investigate whether levels of stress are significantly related to levels of flow achieved in the activity. Stress will be measured using the Short Stress Scale (Helton & Naswell, 2015) which measures flow in three constructs namely Engagement, Worry and Distress which are defined in the table below.

Table 9. Stress Constructs

Construct	Definition
Task Engagement	integrates state constructs that relate to task interest and focus: energetic arousal, motivation, and concentration.
Distress	appears to integrate unpleasant mood and tension with lack of confidence and perceived control.

Worry	is a cognitive factor primarily composed of self-focused attention, self-esteem, and cognitive interference

To further investigate the occurrence of flow, this study will involve a baseline activity (filling out demographic questionnaires as detailed below) along with the creating activity, with a premise to capture potential levels of flow. The previous study hypothesized that creating would facilitate higher levels of flow than non-creating conditions, with no significant difference being found. This study will use the Flow State Scale to measure flow after a baseline activity of measuring flow and after a creating activity to potentially note any differences.

This study will also further quantitatively investigate the occurrence of flow by exploring the different constructs of flow measurable by the Flow State Scale along with the constructs of stress to further determine any insights on measuring the transient concept of flow. To reiterate, the constructs of flow are defined once again in the table below.

Table 10. Flow Constructs

Constructs	Definition
Challenge – Skill Balance (CHAL)	Balance between demands of the task and the skill of the participant
Action-Awareness Merging (ACT)	Involvement becomes so immersed that actions begin to feel automatic
Clear Goals (GOAL)	Feeling certain about the task
Unambiguous Feedback (FDBK)	Clear and immediate feedback

Concentration on the Task at Hand (CONC)	Feeling very focussed
Sense of Control (CONT)	Feeling as though one is in control without conscious effort
Loss of Self-Consciousness (LOSS)	Thoughts or concerns about the self, vanish as the participant is immersed in the activity
Transformation of Time (TRAN)	Feeling of time passing more quickly, more slowly, lack of awareness that time is passing.
Autotelic Experience (ENJY)	Csikszentmihalyi (1990) describes this as the end result of being in flow, a feeling of doing something for its own sake, with no expectation of future reward or benefit.

Previous research as mentioned in the literature review show that there is an increasing interest in the concept of flow, but that there is still more research to be done to provide definitive descriptions and appropriate measurements (Pels, Kleinart & Mennigen, 2018). The Flow State Scale (Jackson and Marsh, 1996) is a quantitative instrument that has been used to measure flow in group settings and this study aims to further utilise this measure in a comparison study of individual versus group flow with the relationship between flow and stress (Helton, 2004) acting also as a validating measure for the flow instrument.

The following study will address the following hypotheses:

1. Flow scores, for both individual and collaborative creating, will be significantly higher after creating than after the baseline activity.

2. There will be a no significant difference in scores for flow in the individual versus collaborative creating condition (after the creative activity).

3. Stress scores (on the constructs of Short Stress State Questionnaire (Helton and Naswall, 2015) will be significantly lower after the creating activity (whether individual or collaborative) as opposed to after the baseline activity.

4. There will be no significant difference in scores for Stress across the individual versus collaborative creating conditions.

5. There will be a significant positive correlation between flow and stress engagement subscale and significant negative correlations between flow and stress worry and distress subscales (as measured by Short Stress State Questionnaire (Helton and Naswall, 2015).

5.2 Methodology

5.2.1 Design

This study adopts an independent groups (between subjects) design. The independent variables are the individual vs. collaborative conditions, and the dependent variable is the Flow State Score. This study also adopts a correlational design exploring the relationship between flow and stress constructs.

5.2.2 Participants

24 students of Salford University were recruited to this study as participants. With the permission and assistance of module and programme leaders students were notified about the study by the Poster (see Appendix Q) being posted on Blackboard sites and/or by the researcher asking for a couple of minutes to speak to

students at the beginning of classes. Students were approached with the Poster in Communal areas such as the libraries, lobbies and cafes and the Poster was also posted on noticeboards across campus. Once interested participants e-mailed their interest, they were sent the Participant Information Sheet (Appendix R). Students were also contacted via email where they are known to the researcher and via existing email lists. The table below details the participants in each condition.

Table 11. Participants

No of participants	Condition
12	Individual creating
12 (two groups of 6)	Collaborative creating

5.2.3   Materials

5.2.3.1 Materials for creating

Materials for artistic creating included paint, markers, crayons, pencil crayons, paper and canvases.

5.2.3.2 The Flow State Scale

The Flow State Scale (Jackson and Marsh, 1996) (Appendix E) measuring Flow across 9 constructs as mentioned previously in Table 10. Participants answered each question on a Likert scale from 1 (strongly disagree) to 5 (strongly agree). Cronbach's alpha was high at .94 for the 36 items of the Flow State scale showing that the scale was internally consistent.

5.2.3.3 Short Stress State Questionnaire (Helton & Naswell, 2015)

The Short Stress State Questionnaire (Appendix S) measures stress across 3 constructs as mentioned previously in Table 9. Participants are asked to select answers on a Likert-type

scale from 1 – 5. An example question is "I feel dissatisfied" and participants rate their feeling of dissatisfaction from 1 – 5 (1 = Not at all; 5 = Extremely).

5.2.3.4 Demographic Survey (Appendix T)

The demographic survey, serves as a baseline activity with which to measure any potential increase in flow scores by comparing the baseline activity to the creating task. The demographic survey consist of basic demographic questions including age, sex and marital status (See Appendix T).

5.2.4 Method/Procedure

Diagram 1: Procedure for Study 4

| Stage 1: Baseline Condition |
| Demographic Questionnaire |
| Flow State Scale, Short Stress Scale |

Stage 2: Experimental Conditions (n = 24)

| Condition 1: (n = 12) | Condition 2: (n = 12) |
| Group Creating | Individual Creating |

Stage 3: Post-measures (n = 24)
Flow State Scale
Short Stress Scale
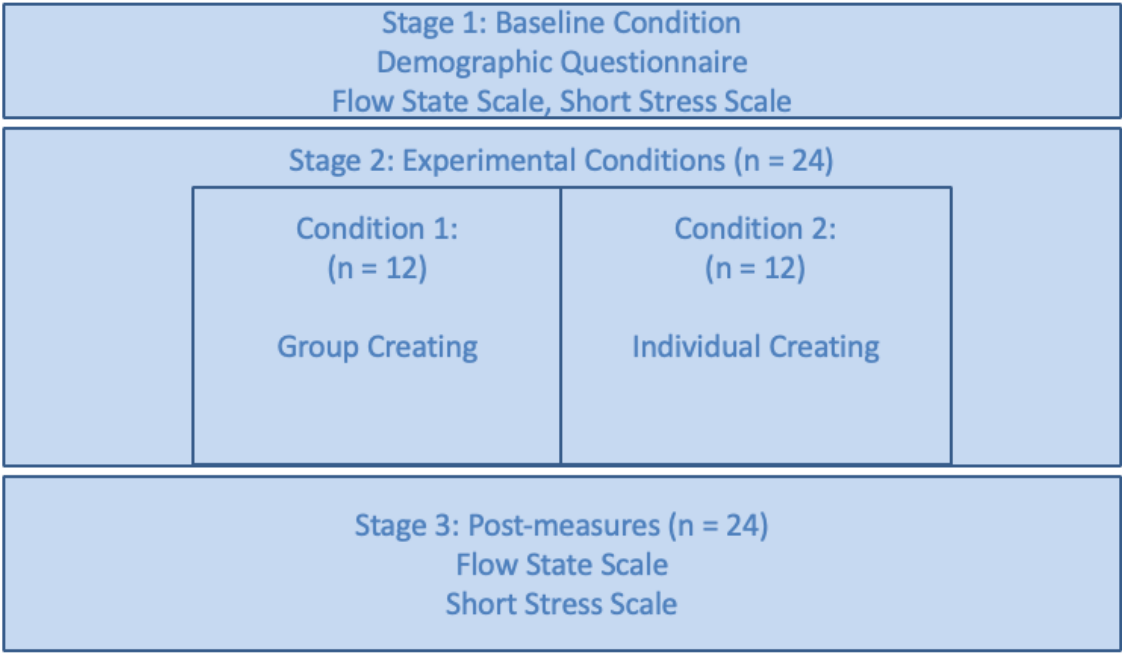
Stage 1: Demographic Questionnaire

Upon arrival in the designated classroom, students were issued a Demographic Questionnaire (See Appendix T). This questionnaire served as a baseline activity to test any differences in Flow and Stress once participants take part in the creating

exercise. Following the questionnaire, participants then completed the Flow State Scale
and the Short Stress State Scale.

Stage 2: Experimental Conditions

Participants were separated under two different conditions as follows:

Condition 1: Group Creating

(n=12)

12 students, 6 per group, were asked to collaboratively create a work of art with their
chosen media. Participants were instructed to choose their own medium and collectively
plan and create a collective work of art. According to Krensky and Steffen (2009) one of
the most important factors of community creating is empowerment. One of the avenues of
achieving this empowerment is the freedom of choice with regard to aspects such as the
theme and the medium. It may also increase a sense of commitment and ownership when
participants maintain control over choosing the medium (Krensky & Steffen, 2008). Also,
two of the conditions of flow are the feeling of control over the task and competence.
Choosing a medium allows for these two conditions to be met (Csikszentmihalyi, 1998).

Condition 2: Individual Creating

12 students were asked to create a work of art individually with their chosen
media. Students met the researcher in a classroom on campus and individually created with
their chosen media.

Stage 3: Post-measures (n=24)

Each participant was administered the Flow State Scale and the Short Stress State Scale
once again.

5.3 Results

One participant from the individual creating condition, neglected to complete one page of the flow state scale. As a result, that data was not included in the analysis leaving a total of 23 participants total and 11 in the individual creating condition.

5.3.1 Preliminary analysis

According to Jackson and Eklund (2004), scores on the Flow State scale at or above the middle of the 5-point Likert scale, is indicative of being in flow. The highest possible score on the scale is 180 and the lowest possible score is 36. Based on Jackson and Eklund's description, to be in flow, participants scores would range between 108 – 180. The range of flow scores in each condition is as follows:

Condition	Range of scores	Mean	n
Individual Creating (after creating)	86 – 176	131.27	11
Collaborative Creating (after creating)	86 – 167	129.42	12
After the baseline activity (all scores before creating)	84 – 154	126.22	23
After creating (all scores after creating)	104 -159	128.67	23

The range of scores are very similar across conditions. The highest Flow State score reached was in the Individual creating condition (176) and the lowest Flow State score reached was after the baseline activity (84). Based on the threshold of 108 – 180. 9 of 11 participants entered flow state in the individual condition; 7 of 12 in the collaborative

creating condition; 18 of 23 entered flow during the baseline activity and 17 of 23 during creating.

5.3.1 Measuring Flow Constructs Before Creating and After Creating

Shapiro-Wilk tests were mostly non-significantly skewed for each condition separately, with the exception of Clear Goals after Creating, Concentration on Task before and after creating and Loss of Self-consciousness after creating (See Appendix U for Shapiro Wilks Scores, significant values are highlighted throughout in bold font). However, the histograms appeared to be mostly not normally distributed (See SPSS Output in Appendix V). Due to this, it was decided that a Related-Samples Wilcoxon Signed Rank Test be used for each construct as well as the total flow sum, to test the hypothesis that there would be a significant difference in scores for flow before (after the baseline activity which is the demographic survey) and after the collaborative creating exercise. Descriptive Statistics are outlined in Appendix W.

To examine whether measurements of flow differ significantly after a creative activity compared to before, the Related Samples Wilcoxon Signed Rank Test was conducted. The table below shows the statistical results from the Related Samples Wilcoxon Signed Rank Test for each Flow construct before and after the creating exercise.

Table 12. Wilcoxon Signed Rank Test for flow constructs before and after creating

Result from Wilcoxon Signed Rank Test	Statistic
No significant difference between the sum of Flow scores before and after creating	Z=0.72, p = 0.48

No significant difference between Challenge – Skill Balance scores before and after creating	Z=1.12, p = 0.16
No significant difference between Action-Awareness Merging before and after creating	Z= -0.55, p = 0.58
No significant difference between Clear Goals before and after creating	Z= -1.53, p = 0.13
No significant difference between Unambiguous Feedback scores before and after creating	Z= -0.77, p = 0.44
No significant difference between Concentration on Task scores before and after creating	Z = 1.48, p> = 0.14
No significant difference between Paradox of Control scores before and after creating	Z= -1.071, p = 0.29
No significant difference between Loss of Self- Consciousness scores before and after creating	Z = 0.44, p = 0.66
There is a significant difference between Transformation of Time scores before and after creating	**Z = 2.22, p = 0.03**

There is a significant difference between Autotelic Experience before and after creating	**Z = 3.50, p = 0.00**

Therefore, the hypothesis that flow scores after the collaborative creating activity would be higher than after the baseline activity was not supported with the exception of the Transformation of Time scores and the Autotelic Experience scores. (See Appendix V for SPSS Output). The medians show that in the case of both constructs, the scores were significantly higher after creating (Transformation of time before creating Median = 10; after creating Median – 12; Autotelic Experience before creating Median = 12; after creating Median = 16)

5.3.2 Measuring Flow Between Conditions – Individual versus Collaborative Creating

Shapiro-Wilk tests were mostly non-significant for flow sum and all flow sub-scales after the creative activity, with the exception of Concentration in the Individual condition and Loss of Self-Consciousness in the Group and Individual conditions as highlighted in Appendix U. Histograms appeared to be mostly approximately not normally distributed (See Appendix V). Due to this, it was decided that a Mann-Whitney U Test was to be used for each construct as well as the total Flow sum, to test the hypothesis that there would be a no significant difference in scores for Flow in the individual versus creating condition (after the creative activity). Descriptive Statistics are outlined in Appendix X.

To examine whether flow scores differ significantly in the individual condition as opposed to the collaborative creating condition, a Mann Whitney U Test was conducted. Table 13 shows the results from the Mann Whitney U test for each construct across

conditions, which shows no significant difference in scores across constructs and

conditions.

Result from Mann Whitney Test across Individual vs Group conditions	Statistic
There is no difference in the total of Flow scores across conditions	U=73.50, p = 0.65
There is no difference in Chal scores across conditions	U=64.50, p = 0.93
There is no difference in ACT scores across conditions	U=65.50, p = 0.98
There is no difference in GOAL scores across conditions	U=71.00, p = 0.79
There is no difference in FDBK scores across conditions	U=62.00, p = 0.83
There is no difference in CONC scores across conditions	U=76.00, p = 0.57
There is no difference in CONT scores across conditions	U=76.00, p = 0.57
There is no difference in LOSS scores across conditions	U=67.00, p = 1.00
There is no difference in TRAN scores across conditions	U = 73.00, p = 0.70

There is no difference in ENJY scores across conditions	U = 73.00, p = 0.70

Therefore, the hypothesis that there would be no significant difference between flow scores during the collaborative creating activity and during the individual creating activity is supported (See Appendix V for SPSS Output).

5.3.3 Measuring the Difference in Stress Subscales before and after creating activity

Shapiro-Wilk tests show both significant skewness and non-significant skewness for each condition separately (See Appendix Y)**.** However, histograms appeared to be mostly not normally distributed (See SPSS Output in Appendix V).   Therefore, a Related-Samples Wilcoxon Signed Rank Test was used for each subscale to test the hypothesis that the Stress scores (on the constructs of Short Stress State Questionnaire (Helton & Naswall, 2015) will be significantly lower after the creating activity (whether individual or collaborative) as opposed to after the baseline activity. Descriptives are outlined in Appendix X.

Table 14. Wilcoxon Signed Rank Test Result

Result from Wilcoxon Signed Rank Test	Statistic
No significant difference between Engagement difference scores before and after creating	Z= - 0.87, p = 0.38
No significant difference between Distress difference scores before and after creating	Z= - 0.12, p = 0.90
No significant difference between Worry difference scores before and after creating	Z= -0.98, p = 0.33

Therefore, the hypothesis that Stress scores after the collaborative creating activity would be lower than after the baseline activity two activity conditions was not supported. (See Appendix V for SPSS Output).

5.3.4 Measuring the Difference in Stress Subscales in the individual versus creating condition

Shapiro-Wilk tests show a significant skewness for Stress constructs with the exception of worry as detailed in the table above. Histograms also appeared to be mostly not normally distributed (See Appendix V). Descriptives are outlined in Appendix AA.

Therefore, a Mann Whitney U Test was used for each subscale to test the hypothesis that there would be no significant difference in scores for Stress across the individual versus creating conditions. Results from the Mann Whitney Tests are below.

Table 15. Mann Whitney Test results for stress across individual versus collaborative creating conditions

Result from Mann Whitney Test across Individual vs Group conditions	Statistic
There is no significant difference in Engagement difference scores across Individual versus group conditions	U=88.00, p = 0.38
There is no significant difference in Worry difference scores across Individual versus group conditions	U=42.00, p = 0.09
There is no significant difference in Engagement difference scores across Individual versus group conditions	U=57.00, p = 0.41

Therefore, the hypothesis that there would be no significant difference between Stress scores between the individual versus creating conditions is supported. (See Appendix V for SPSS Output).

5.3.5 Measuring Correlations between Stress Subscales and Flow Constructs

As portrayed in the above tables, both the Flow and Stress constructs have some constructs with significant skewness and others with non-significant skewness. Histograms for both constructs are mostly not normally distributed (See Appendix V). As a result, a Spearman's Rho Correlation was used to analyse data. Results are shown below.

Table 16. Spearmans Rho Correlation between Flow and Stress constructs

Flow Subscales	Stress Subscales	Correlation Statistic
Flow SUM After Creating	**Engagement**	$r_s (21) = 0.82, p = 0.00$
	Worry	$r_s (21) = -0.01, p = 0.48$
	Distress	$r_s (21) = -0.39. p = 0.03$
Challenge- Skill Balance	**Engagement**	$r_s (21) = 0.70, p = 0.00$
	Worry	$r_s (21) = -0.12, p = 0.29$
	Distress	$r_s (21) = -0.55, p = 0.00$
Action Awareness Merging	**Engagement**	$r_s (21) = 0.71, p = 0.00$
	Worry	$r_s (21) = 0.04, p = 0.44$
	Distress	$r_s (21) = -0.31, p = 0.07$
Clear Goals	**Engagement**	$r_s (21) = 0.40, p = 0.03$
	Worry	$r_s (21) = -0.18. p = 0.21$
	Distress	$r_s (21) = -0.12, p = 0.10$

Unambiguous Feedback	**Engagement**	**r_s (21) = -0.73, p = 0.00**
	Worry	r_s (21) = -0.02, p = 0.46
	Distress	r_s (21) = -0.27, p = 0.11
Concentration	Engagement	r_s (21) = 0.46, p = 0.14
	Worry	r_s (21) = 0.03. p = 0.45
	Distress	r_s (21) = -0.01, p = 0.49
Paradox of Control	**Engagement**	**r_s (21) = 0.54, p = 0.00**
	Worry	r_s (21) = -0.27, p = 0.11
	Distress	r_s (21) = -0.27, p = 0.10
Loss of Self-Consciousness	**Engagement**	**r_s (21) = 0.60, p = 0.00**
	Worry	r_s (21) = -0.43, p = 0.02
	Distress	r_s (21) = -0.27, p = 0.10
Transformation of Time	**Engagement**	**r_s (21) = 0.44, p = 0.02**
	Worry	r_s (21) = 0.30, p = 0.08
	Distress	r_s (21) = -0.14, p = 0.26
Autotelic Experience	**Engagement**	**r_s (21) = 0.73, p = 0.00**
	Worry	r_s (21) = 0.10, P = 0.33
	Distress	**r_s (21) = -0.38, p = 0.04**

The results show that the Flow sum, as well as the constructs Challenge Skill Balance, Action – Awareness Merging, Clear Goals, Paradox of Control, Loss of Self-Consciousness, Transformation of Time and Autotelic Experience are all significantly, positively correlated to the Engagement construct of stress. The Unambiguous Feedback construct is negatively correlated with Engagement. There is no significant correlation

between Flow or any Flow constructs and any stress constructs. Flow total, Challenge-Skill Balance and Autotelic Experience are negatively correlated with Distress.

5.4 Discussion

The following section will discuss the results and apply the results to previous literature, focusing on potential reasons for results, potential reasons for any similarities or discrepancies and future directions for research.

The first hypothesis that Flow State scores after the creating activities would be higher than after the baseline activity was not supported with the exception of the Transformation of Time scores and the Autotelic Experience scores. First, the definition of the constructs Transformation of Time and Autotelic Experience will be revisited. The transformation of time dimension of flow refers to the loss of a sense of time while immersed into the task (Csikzentmihalyi, 1990). Autotelic Experience refers to the engaging in an activity, for the very sake of the activity, rather than for a future reward (Csikzentmihalyi, 1990). In other words, the reward or enjoyment comes from engagement with the task itself. The medians show that in the case of both constructs, the scores were significantly higher in the creating conditions.

These results imply that the participants enjoyed the task of creating more than the baseline activity. The results also imply that along with enjoying, there was a greater loss of sense of time among participants while creating. The results are in support of some of the evidence found in the context of art therapy. Researchers suggest that creating is an activity that facilitates enjoyment as well as catharsis from participants (Ferszt et al., 2004; Malchiodi, 2003). Studies also highlight loss of time as a construct that occurs during artistic activities (MacDonald, Byrne & Charlton, 2006; Jackson, 1992; Hart & Di Blasi,

2015). Though the study hypothesized that the art activity would produce more flow, studies show that several activities have flow inducing properties (Chirico, Serino, Cipresso, Gaggioli & Riva, 2015). Perhaps in this case, it was a misstep to assume that filling out demographic forms was a task that would elicit less flow. What the results do show however, is that the element of enjoyment is substantially more present in the art activity. Perhaps an argument can be made that if a task is more enjoyable, there is more of a chance for one to lose track of time, hence the phrase *"time flies when you're having fun"*. In a similar experiment, Walker (2010) discovered participants found group flow more enjoyable than solitary flow while playing paddleboard games. In this case, there is some evidence to suggest that within the context of flow, creating may be a task that elicits more of the enjoyment aspect of the flow concept.

The second hypothesis that there would be no significant difference between Flow scores during the collaborative creating activity and during the individual creating activity is supported. This implies that the levels of flow in both creating and collaborative conditions was similar. Previous studies indicate that flow occurs on an individual level while creating art (Csikszentmihalyi 1975, 1990, 1992; Reynolds & Prior, 2006; Hefferson and Ollis 2007, Keith, 2003, Nakamura & Csikszentmihalyi, 2002). The literature review also points out that there are very few studies exploring group flow in a collaborative art setting (Pels, Kleinert & Mennigen, 2018). This study adds to the literature, providing evidence of no difference in the levels of flow in individual versus group flow settings within the context of collaborative creating. This study specifically relates to visual art. Previous studies on group flow and collaborative arts focus on music making (Pels, Kleinert & Mennigen, 2018). This study provides some insight into visual art-making and adds to the conversation and discovery of group flow within the arts.

The third hypothesis that stress scores after the collaborative creating activity would be lower than after the baseline activity was not supported. The results show no significant difference of scores before and after the activity conditions. This implies that the participants stress levels before creating were not affected by the collaborative creating conditions. This result may be explained through research by Reynolds and Prior (2006), who discovered that entering into a Flow State allows one to forget any stress or negative thoughts that they might have been experiencing while their focus is on the task at hand (Reynolds & Prior, 2006). The important point to notice is that this "forgetting" of stress took place during the task. In other words, the filling out of the Short Stress Scale before and after the task may not be suitable for measuring what was taking place during the task. Jackson and Marsh (1996) argue in the case of flow, that there are limitations to using the Flow State Scale as it can only be applied retrospectively. This could also be considered a limitation of the Short Stress Scale, when one is concerned about what is happening during a task or event rather. Using the Short Stress Scale before and after, provided a way of observing any potential "effect" that collaborative creating may have had on stress. However, it is not clear through this measure, whether during the creating, participants were in fact feeling less stressed. It is important to note that Reynolds and Prior (2006) conducted a qualitative study employing semi-structured interviews as a methodology. This method allowed for a reflective discussion of the process of creating and participants were able to express their experiences during the task. There may be an argument here in support of Csikszentmihalyi (2002) that quantitative methods provide restrictions of measuring flow due to its transient nature.

The fourth hypothesis that there would be no significant difference between Stress scores between the individual versus creating conditions is supported. This implies that creating individually verses creating collaboratively, had no effect on the stress scores.

Similar to the previous paragraph, there is a possibility that whatever takes place with participants, may be taking place "during" the creating activity and thus not measurable after the fact using a quantitative measure.

The fifth hypotheses that there would be a significant positive correlation between flow and stress was somewhat supported, but there were differences within constructs. Firstly, the results show that the flow sum, as well as the constructs Challenge Skill Balance, Action – Awareness Merging, Clear Goals, Paradox of Control, Loss of Self-Consciousness, Transformation of Time and Autotelic Experience are all significantly, positively correlated to the Engagement subscale of stress. Helton (2004) describes engagement as a construct that relates to focus and interest on the task, as well as motivation, level of concentration and arousal. Interestingly, this description of engagement is quite similar to the description of flow. Flow itself is described as engagement with a task. As mentioned in the literature review, Keller (2016) expresses s similarity between flow and stress, in that they both involve high involvement in a task, and both include a challenging task. The results of this study provide support for this idea, as it shows that the higher the levels of flow, the higher the engagement construct of Stress and the lower the constructs of Worry and Distress.

The Unambiguous Feedback construct is negatively correlated with Engagement. In other words, the higher the Unambiguous Feedback the lower the level of engagement. As a refresher, Unambiguous feedback refers to instant, clear and confirming feedback is received. This implies that more feedback causes less engagement. This result could also be quite useful in the context of flow. Though Czikszentmihalyi (1975) discovered the values of this feedback in facilitating flow, it may be the case that too much feedback reduces engagement with the task.

There is no significant correlation between flow or any flow constructs and Worry. Worry is described as occurring when a person is focused on the self (Helton, 2004). Flow is described as occurring while one is completely focused on a task. Thus, if one is focused on the self, it is plausible that flow would not occur. In this case, there is no significant relationship present between flow and worry which could be explained due to a completely different focus of attention.

Flow total, Challenge-Skill Balance and Autotelic Experience are negatively correlated with Distress. Distress appears to integrate unpleasant mood and tension with lack of confidence and perceived control (Helton, 2004). In flow, challenge-skill balance refers to a sense of balance between the demands of the situation and skills to address the demands. In this case, the higher the enjoyment of the task and the balance between challenge and skill the lower the levels of distress. This study supports previous researchers that highlight the differences between stress and flow as illustrated by Lazarus and Folkman (1984) and Peifer (2012), who discuss that stress occurs when one views his/her resources as insufficient to cope with the task.

5.4 Limitations

Overall, there are limitations to using the Flow State Scale to study flow across various conditions. The previous studies in this thesis show that using qualitative methods may provide more of an insight to the participants experience of flow in different settings as well as any circumstances that may inhibit or further facilitate the phenomenon. Future research could consider using more observation methods in various different artistic settings to further understand what occurs during group flow. Similarly, as mentioned before, quantitative measures are limited to capturing information after the event. In this case, it was difficult to capture any changes in stress during the task. Perhaps future research could consider using scientific methods to measure biological features such as

heart rate throughout the creating process to observe any changes throughout the task, under different conditions.

5.5 Conclusion

Similar to study 1, no differences were found across conditions, in this case, individual versus collaboration. This supports the idea of the occurrence of group flow, but provides similar challenges as Study 1 as to having a greater understanding of levels of flow across conditions. What can be ascertained however from this study is a relationship between flow and stress constructs. This study shows that an increase in flow facilitates a decrease in distress and worry constructs of stress. This research supports previous research that has found that flow has a positive relationship with wellbeing (Reynolds & Prior, 2016; Nakamura & Czikszentmihaly, 2009). The results also support Hallaert (2019), who found that artistic activities that facilitate the flow state may serve as protectors from the risk of suicide. The negative relationship between flow and distress and worry could account for this as the engagement and focus remains on the creating task, even if only for a moment.

In essence, this study adds to the literature by providing evidence that group flow has a positive relationship with wellbeing, and that though quantitative measures are able to capture some elements of flow, qualitatively measuring this concept can provide additional, useful, experiential information for further understanding of the concept.

The following chapter will investigate the artwork procured from this study through semiotic analysis, to explore any insights of individual vs collaborative creating that can be gained through the expression of the participants through art.

Chapter 6. Study 5: A semiotic analysis of the artwork procured from Study 4.

6.1 Introduction

The previous study investigated the occurrence of flow across the conditions of individual creating and collaborative creating. The study found no significant difference in stress or flow across conditions. Under each condition, participants procured several works of art. Though given the opportunity to choose a medium of their own choice, each participant chose to create a visual piece. These created pieces thus provide another platform for analysis to gather any additional information about collaborative creating as opposed to individual creating, that may not be captured through the quantitative measures of flow and stress. This study will focus more on any symbols of identity that may have emerged from the creating activities. Art-based research analysis provides a separate lens through which to gather information, particularly as it relates to social identity (Cohenmiller, 2018; Coemans & Hannes, 2017). Thus, this research aims to gain a further understanding of the experience of the participants in individual versus collaborative creating through semiotic analysis of the artwork. Specifically, this research will deduce any symbolism in both conditions and discuss any potential differences that occur within creating individually and collaboratively. The research question for this study is:

Do visual symbols highlight any differences between individual and collaborative creating?

6.2 Methodology

6.2.1 Design

This is a qualitative study, using semiotic analysis to explore investigate and analyse images created by participants in Study 4.

6.2.2 Participants

A total of 24 University of Salford students engaged in creating artwork across the two conditions. 12 participants created individually, and 12 participated in groups (6 in each group) as detailed in the table below.

Table 24. Participants for Study 3

Condition	Number of Participants
Individual Creating	12
Collaborative Creating	12

6.2.3 Procedure

Semiotic analysis was used to investigate the artwork procured from the above-mentioned conditions. As explained previously in Study 3, Semiology is the study of signs and symbols and serves to provide analysis exploring the meaning behind these signs and symbols (Gillian, 2012). As mentioned in Study 3, semiotic analysis concentrates on detailed studies of a small number of images as the focus remains on the analysis of the art in a particular context or setting, rather than an aim to generalize (Gillian, 2012). This study focuses on the context of creating as an individual and collaborative creating.   Similar to Study 3, to allow for specificity and depth of analysis, two works of art from each condition will be analysed.

To reiterate, the following steps were taken in conducting the semiotic analysis of the artwork procured from the study (Gillian, 2012):

- Identifying the symbols/signs are:

First, the researcher observed the artwork. All participants in both conditions chose to create visual art. Once engaged with the art, the researcher then identified the symbols. The research questions and motives of the study assisted in identifying and reporting the relevant symbolism. The researcher was present during the creating activities and thus the descriptions of the participants about what they created was included in the analysis.

- Identifying what the symbols/signs signify:

Once the symbols were identified, their significance was then discussed in line with the research question.

- Consider how they relate to other symbols/signs.

The researcher then highlighted how the symbols in each condition related to each other, whether any parallels could be drawn, as well as any differences and what these could indicate.

- Explore their connections to wider systems of meaning, from codes to ideologies.

Connections in line with the theoretical framework and literature review were discussed in order to address the research questions.

6.3 Results

For each condition, this section will first identify what the symbols are, identify what the symbols signify, then consider how they relate to other symbols and signs within that condition. As in the case of Study 3, two pieces of art will be used from each condition to allow for detailed description and analysis.

6.3.1 Condition 1 – Individual Creating

Image 6: Individual Creating Image 1

6.3.1.1 Identifying the symbols

The painting above was created by a participant in the individual creating condition. There is a mix of blue orange and yellow in the skies, and the grass shows a mix of different shades of green. There is a tree depicted next to a house in front of a black fence. There also appears to be spots of red and yellow flowers in grass.

6.3.1.2 What do the symbols signify

The participant explained that this is a painting of her grand-parents garden behind their house. She explained remembering how calm and beautiful the garden was and explains that she also tried to capture the evening skies using the blue yellow and orange paint. This painting symbolizes a very personal memory for the participant. She attempted to re-create a memory that was vivid in her own mind and this is what transferred unto the canvas.

Image 7: Individual Creating Image 2
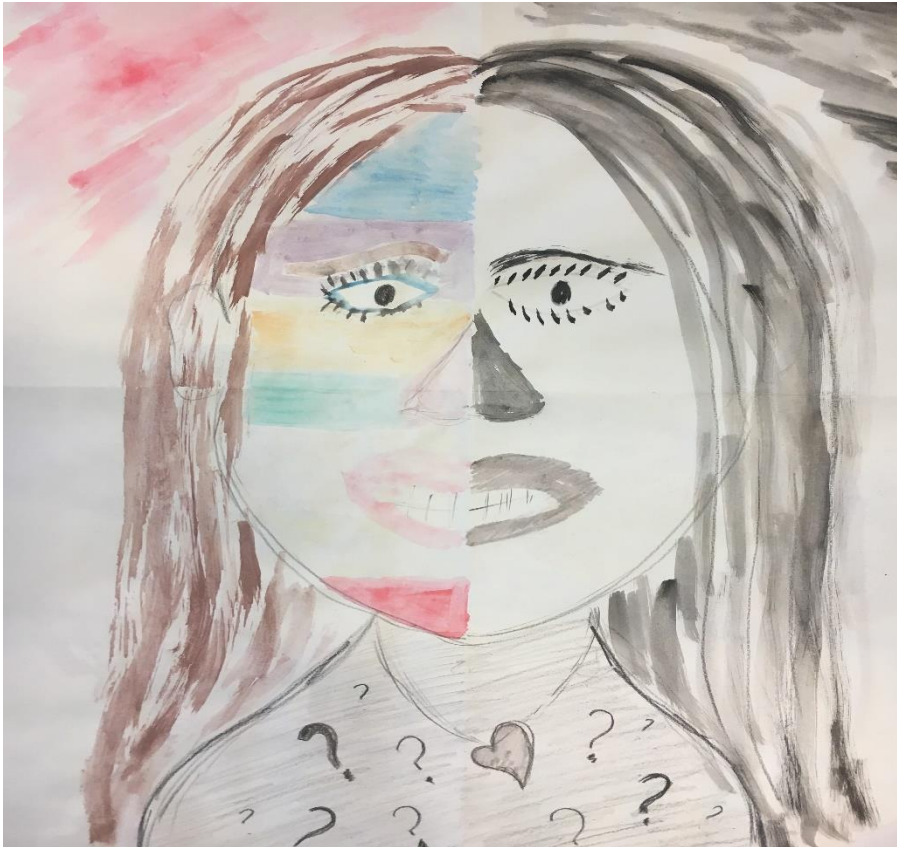
6.3.1.3 Identifying the symbols

The image above portrays a girl with her face separated into two halves. On one half, the lady's face and the background of her face is very colourful. Her hair is brown and there are several colours on her face; blue, purple, yellow green. On the other half, only the colours black and white are used on her face against a black and white background. She is wearing a heart shaped necklace and from her neck downward, question marks are written on her blouse.

6.3.1.4 Identifying the symbols

The artist expressed that this image represented her own journey of understanding who she is. The colourful side of the face represents the colourful and interesting parts of her personality. The black and white side represent the more straightforward, serious parts of

who she is. The question marks on her blouse represent her own personal searching and q

questioning of which one of these sides of the image best represent her.

6.3.2 Considering how symbols from Individual Creating Condition relate to each other

It is important to note here that within this condition, each creation symbolized either a personal memory or a representation of him/herself translated through the artwork (See Appendix AB for more examples). In other words, everything that was expressed on the canvas was entirely relating to the self. The first image is a valued personal memory, and the second image is a personal interpretation of the self. It is useful to reiterate at this point that participants were instructed to create whatever they chose. In spite of that, a similarity across conditions is noted.

It is interesting to note that in the individual creating condition there were 12 works of art created (See Appendix AB for more examples). In each work of art created in this condition, similarly to these two portrayed here, either a personal memory, a representation of the self, or personal feelings and preferences were expressed unto the canvas.

6.3.3 Condition 2 – Collaborative Creating

Image 8: Study 2, Group Creating Image 1

6.3.3.1 Identifying the symbols

The above image is a collaborative drawing of a jungle. There are different depictions of trees and snakes, along with other animals. There is a lot of greenery in the background, birds in the sky and the shining sun.

6.3.3.2 What do the symbols signify?

First there are a number of repeated objects in this image. There are a number of snakes and a number of trees. Each snake is different, and each tree is different, but they all fit into the theme of the jungle. It is interesting to note that there are several different kind s of animals that live in the jungle, but represented here mostly are snakes. Each snake was drawn by a different member of the group, thus they all have different features. However it is interesting to note that the participants mirrored each other in the drawing of the snakes and the trees. There are also other animals represented and a background of different shades of green which were all contributed by all members of the group. What becomes evident here, is this jungle provides an opportunity for all participants to participate. The symbolism here can be derived from the intentional choice to create a jungle. A jungle theme, allows for each participant to contribute to one final wholesome work of art, while

each contributing a relevant factor. In other words, the jungle itself symbolises inclusivity, as though there are different kinds of trees, different kinds of snakes and mammals, all drawings are relevant and the final work of art is in fact a visual representation of a jungle. The repetition of the snakes may also bear some symbolism, representing the singlemindedness of the group while still allowing for individual contribution. Thus, this collaborative effort provided space for an individual contribution in such a way that the final piece was representative of the whole group.

Image 9: Study 2, Group Creating Image 2
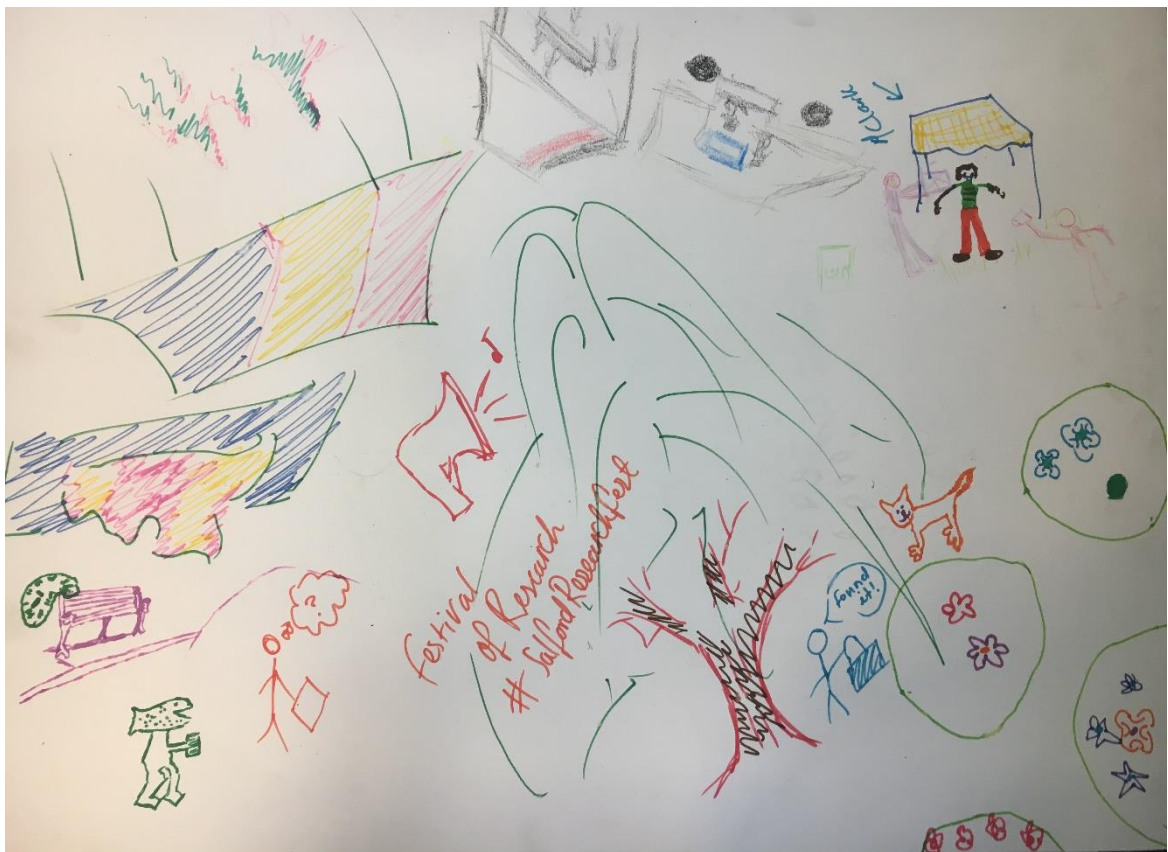
6.3.3.2 Identifying the symbols

The image above is a depiction of the participants of the festival of research that was taking place outdoors on the day of the study. The collaborative image shows drawings of tents, flowers trees and people.

6.3.3.2 What do the symbols signify?

The image above also portrays a repetition of objects. In this case, several tents were drawn by different participants as well as flowers and people. It is interesting to note that the idea of choosing to recreate the festival of research through drawing, was as a means of allowing each group member to easily be able to add to the overall image. Again here, the repetition of objects could also signify a cohesiveness of thought amongst participants. Though there are more than one tents, each tent looks different as was created by a different person. The same can be said for the patches of flowers and the different depictions of people.

6.3.4 Considering similarities within each condition

Within this condition, both creations were representations of the outdoors. It is important to note also that both creations allowed for inclusivity of all members of the group by choosing to create something that could include everyone's input while allowing for one final work of art to be representative of the whole group. Both creations also show repetition of objects amongst participants.

6.4 Discussion

The group creating condition facilitated groups creating whatever they chose. In this condition, both creations depicted the outdoors. It is interesting to note that these

environments were chosen in order to facilitate inclusivity of all the participants. As a result, one work of art was created that included input from all participants. The artwork itself may symbolize inclusivity. It is also important to note the repetition of certain objects created within the group which could be translated to symbolise singlemindedness or cohesiveness among group members. As mentioned previously, the social identity refers to a person's sense of who they are as a result of perceived group membership (Diehl, 1990; Tajfel & Wilkes, 1963). The Social Identity Theory (SIT) refers to one's understanding of him/herself in relation to others in a group context (Burke, 2006). It becomes evident from this analysis, that collaborative creating on its own, facilitates a social identity between group members and this can be depicted through artwork analysis. The decision, for example, to create a jungle, in which all participants can easily contribute is an expression of acknowledgment of belonging to something that extends beyond the self.

The individual creating condition provides a framework with which one can compare what takes place during group creating as opposed to individual creating. As mentioned in the results section, all of the individual works of art symbolized either a personal memory or they were a representation of the self. Their art pieces provided no room for an "other", except arguably from the end of a receiver of the art, and were entirely based on self-expression.

Through comparison of the artwork procured in both conditions, the analysis is supported by previous research in the literature review. Bukowski states that *"The way to create art is to burn and destroy ordinary concepts and to substitute them with new truths"* (Bukowski, 2008, pg.2). By observing both conditions one could argue that collaborative creating facilitates this "burning" of individual concepts and substitutes them with collective truths or ideas.

160

It is also interesting to note at this point, that there are aspects of these images that can be related to group flow. Armstrong (2008) conducted a study observing a jazz band and details that an observable aspect of being in group flow is synchrony of movement. Similarly, participants in Jackson's (1992) study, express a sense of unity and synchrony during ice skating with their partners. Perhaps this study indicates another means of observing group flow through visual arts, that is, the mirroring of ideas through visual expression. This mirroring is depicted in both drawings and could be a result of entering into group flow along with participants. An element of cohesiveness could be considered measurable through this type of visual analysis.

6.5 Conclusion

Overall, this study provides a bit more insight as to what takes place during collaborative creating. In both collaborative creating groups, subjects were chosen that provided space for everyone to participate. Each person was able to give an individual contribution that had a role in the overarching theme of the image. Both collaborative conditions also show repetition of particular images among participants, which shows a mirroring of ideas being translated into the artwork that could be a measureable depiction of group flow. Previous research has made recommendations for collaborative arts to be placed in the realm of intergroup conflict (Lebaron, 2014; Bang, 2016). This study highlights some of the characteristics of collaborative creating that could facilitate a social identity among participants. Future research could consider exploring various artistic media. The participants of this research focused on university students with an age range of 18 - 55. It would be interesting to consider this experiment among more specific age ranges and career demographics to be able to make more specific claims about the effects of creating together. It would also be interesting to explore further, the observation of

group flow through collaborative visual arts as well as other artistic media, and

discovering potential ways that different expressions of art can provide evidence of being

in group flow.

Chapter 7: Study 6 – An Interpretive Phenomenological Analysis: Exploring creating from the artists perspective, and any implications on flow, wellbeing and identity.

7.1 Introduction

Thus far, previous studies have investigated flow and potential implications on identity and wellbeing through quantitative and arts-based methods. Each study has provided different information about the concept of flow and identity within the context of collaborative creating. Each study however, has explored these concepts within an experimental setting, with a variety of people, some of whom do not identify themselves as artists, or who regularly take part in activities. This does not reduce the value of the information gathered, but leads the research to further divulge into the concept of collaborative creating, through the experiences of people who identify themselves as artists

This research will explore the experiences of artists participating in creating art, including collaborative creating. An Interpretive Phenomenological Analysis (IPA) study was conducted primarily because this approach focuses on understanding people's experiences and attitudes (Patton & Cochran, 2002) and allows the interpretations and perceptions of the artists being interviewed. IPA gives the interviewee the opportunity to interpret and describe events from their own point of view based on their own experience (Smith, Larkin & Flowers, 2009). It is an understanding of their own experiences as well as how they interpret their own experiences. (Eatough and Smith, 2006).

This research takes an inductive approach, in that this study aims to gather information from participants from their experiences with art-making, that may essentially inform theory regarding collaborative creating and any implications, particularly in the context of identity salience, group flow and wellbeing. As a result, the research question for this study is:

How do artists perceive their experiences of creating, including collaborative creating?

7.2 Methodology

7.2.1 Design

The study is qualitative in nature, in the form of an Interpretive Phenomenological Analysis. IPA Analysis was chosen in order to gain knowledge from the experiences of artists, that may inform current theory on group flow facilitated by collaborative creating and any implications of these on identity, conflict and wellbeing,

7.2.2 Participants

6 participants were recruited, 3 males and 3 females, all of whom identify themselves as artists. According to Smith and Osborn, "A distinctive feature of IPA is its commitment to a detailed interpretative account of the cases included and many researchers are recognizing that this can only realistically be done on a very small sample…" (Smith and Osborn, 2007, p. 56). The table below provides a short profile of the participants with their pseudonyms and media of expression.

Artist	Medium of Expression
Isaac	Visual Arts
James	Singing
Matthew	Music
Milly	Acting/Writing
Jennifer	Acting/Visual Arts
Danielle	Spoken Word/Rapping

7.3.3 Procedure

The researcher, who is also an artist, recruited 6 participants by asking artists whom she already knows and artists who have referred other artists. Participants were made aware that there was no pressure to participate even though they know the researcher. Dates and times were arranged with participants for semi-structured interviews. Interviews took place in person and via Skype depending on locality and availability of participants. Semi-structured interviews were conducted to allow for freedom of the researcher to explore novel, interesting ideas that were brought up by the participants and to focus in on any particular subject that might not have been considered by the researcher (See Interview Guide Questions in Appendix AC). Questions focused on the artistic experiences of artists, guided with the aim of understanding any implications of identity, wellbeing and conflict (e.g. Can you describe how you felt working on a collaborative piece? Do you have any reflections on how you feel about conflict or stress in your life or in the world when you are creating your art? How do you feel toward your co-artists while collaboratively creating?)

-

Once the interviews were completed and transcribed, the following steps for IPA analysis outlined by Eatough and Smith (2006) were followed:

(i) Several readings of the data were made to gather a rounded perspective.

(ii) Initial emergent themes were identified based on noteworthy parts of the text identified in the interviews.

(iii) Superordinate themes were then identified

(iv) A narrative was then written up of the participants accounts alongside the interpretation of the researcher, but with an emphasis on the participants own words and experience.

(v) In a separate discussion section, the results are then analysed in light of the previous research.

7.3 Results

From the semi-structured interviews, emergent themes were noted after analysis (See full list of emergent themes in Appendix AD). After continued analysis a final set of 6 superordinate themes were identified. The superordinate themes are as follows:

- My art, my *own*

- Groups coming together to create

- A *relaxed, safe space*

- *Blending*

- The *inevitable* conflict

- *Impact, Openness* and *Wellbeing*

This section will discuss each superordinate theme in depth, highlighting the participants responses and experiences which will then be related to previous literature in the discussion section.

7.3.1 My art, my own

This theme shows the participants descriptions of their experiences creating on their own and what this means to them. Participants describe the idea of creating individually as a very personal experience in which they have the freedom to create what they want, how they want to and bear full responsibility of the outcome. They also describe a sense of ownership on the work of art.

Jennifer's experiences creating individually highlight this theme. She says,

"When I'm working individually, everything is my own and subconsciously, that pleases oneself because it's like, this is like my own ideas, I've done this myself" (Jennifer).

Jennifer here highlights this sense of ownership when creating on her own and describes that this is a good feeling, because she produced everything herself. She goes further to describe this as a freeing experience:

"...when you are working individually, there's also this freeing idea that it's all just your own and you're not going to be judged or no one's going to disagree with any of your ideas because essentially, they're all right."

Again, the idea of ownership over the art is expressed, and along with this she states that all of her ideas are "right", as she is the one with the final say on what is created. She goes further to describe the individual experience of creating as being "trapped in a bubble".

"...and usually from my experience, I know people do art more individually, they like to paint, or write music or poems sort of things. Sometimes you do get trapped in that bubble of , 'It's my work, it's all about me, this is my song'.

Jennifer clearly illustrates here a sense of ownership and personal control over individual creating, that is completely focused on the individual and how heshe chooses to express. Similarly, Isaac describes individual art is being "in a bubble".

"..with your own personal practice, a lot of artists are set in their own ways and you have your own expectations…artists will have their own expectations, quite a clear vision There's almost like a bubble around the artists and their working in that bubble" (Isaac).

Isaac here highlights the idea that working individually usually facilitates artists working based on their own expectations and vision for the artwork. The idea of being in a bubble suggesting no room for others or other ideas. James mirrors this idea, as he describes being able to work *selfishly*, when he is creating on his own.

"Working on my own, I feel I have more control and I'm able to express selfishly how I feel about how I interpret the song. I'm able to really make it my own and express my own feelings and rearrange in my voice or just in my style, or to tell the story the way I understand it."(James)

James describes how individual creating allows him to tell his story in his own way. His use of the word selfishly, also provides an idea similar to being in a bubble, in that there is no room for anyone else or anyone else's input on the created work. Danielle also highlights this idea of ownership by explaining that whatever the outcome of the creation, the responsibility lies completely with the artist.

"When you're performing by yourself, everything falls on you. So if you mess up, you blame yourself. If you didn't remember your lines or whatnot, you can only blame you for the lack of preparation or freezing moments and what not. Also, you have to go up there by yourself, so you have to have that level of confidence to be strong in yourself and to own that stage and have that presence" (Danielle)

Danielle expresses her in the context of performing arts, that ownership extends to the success of the performance. The artist, in Danielle's eyes, should take full responsibility. She also expresses ta level of confidence that is necessary to procure and express a work of art that was individually created.

The participants describe a strong sense of ownership over their created work, and the freedom to have complete control over the creation and outcome of the artwork. Danielle takes this a step further to include the responsibility that comes with that ownership, that rests solely on the artists' shoulders.

7.3.2 Groups coming together to create

This theme highlights the contexts discussed by participants, in which collaborative creating, from their own perspective, appeared to have a significant impact. Participants were able to give personal experiences within which they were able to discuss a context of different groups with salient and in some cases, opposed identities, who in spite of this were able to come together and create a work of art collectively. The following will describe and explore the testimonies of the participants.

Isaac describes several contexts within which collaborative art brought people identifying into different groups coming together to create. The first he describes took place in Peckham;

"It was in Pekham, right around the time Peckham as becoming gentrified. It was 2010. There was this incoming outsider community that was bringing all this wealth and changing Peckham, and then there was the longstanding community That's who we were working with. There were a lot of artists, a lot of artists coming in." (Isaac)

Isaac further describes an art project within which students from very different universities came together to work on an art project.

"I had students from Central Saint Martins helping me as volunteers and also from City & Islington College, two very different universities[...]the Central Saint Martin is this elite art school, and then City and Islington is more of a community art[...]even in that clash of cultures, it was really interesting just to observe where different people were coming from. I don't think each group ever really got to like each other, but they were there working together."(Isaac)

It is interesting to note that Isaac points out that participants did not like each other, neither did they start to like each other, but in spite of this they collaborated on a work of art together. Similar to this example, Isaac provides another context in which he engaged in a workshop with different groups. Below he describes his experience in Doncaster:

"This was right before the Brexit Vote, and there was a lot of tension between the long-standing English community and some of the immigrants who were coming in. To the point where there were physical clashes between the two groups. We had workshops where everyone came together. I didn't see any animosity."(Isaac)

Again here, Isaac describes two communities that identify themselves in different groups. Immigrants as opposed to a long-standing British community. In this case, there is not only an opposing identity, but according to Isaac, there was physical expression of a conflict between the two groups. However, in spite of this, both groups came together to create and Isaac witnessed no animosity between the groups in this context.

Matthew's interview further highlights this theme as he describes taking part in an art project in Middlesbrough with a similar mix of identities:

"...it's really big refugee community, but it was also very much a pro-Brexit working class white community. Having those two groups...singing together it is a very powerful, but also for the audiences to see that actually, we're united together. If we can live together on stage together, what is that? How does that potentially play out in society?" (Matthew)

Matthew here discusses a collaborative art project again involving two groups of very different perceived identities, coming together to sing. He describes the event as powerful and questions how this event of collaboratively creating together could potentially translate into life outside of the collaborative creating context. He goes further to describe their coming together as amazing.

"...when they came together it was just an amazing experience." (Matthew)

Matthew goes further to describe his personal experience witnessing a professional orchestra made up of Jewish and Palestinian people, who outside of the context of collaborative creating, would typically be identified as separate groups with often physical expressions of conflict.

"It's a professional orchestra made up of Jewish and Palestinian people just playing, not discussing problems. Actually, that is, it's just amazing to watch […] You don't really have to discuss what you're seeing, you just experienced this phenomenal music being a

170

way to just change the narrative of what's happening. That when there's pain, there is also togetherness and love." (Matthew)

In this particular example, Matthew describes this experience from the perspective of the observer. He is amazed by what he is witnessing and highlights that in spite of their identities, they come together to just play, and the result is *phenomenal*.

Matthew also describes his participation in an event in Rio. One of the events was homeless people and local police performing together, who previously, did not have a very good relationship:

"...the homeless people had one performance, done something with the local police, they had performed with a police event. After that, the relationship between the homeless people and the police was much better [...] They'd see each other on the street and do high fives and stud. That's a really tangible example of a relationship that needed to be repaired." (Matthew)

Matthew here describes a musical collaboration between the local police and the homeless in Rio de Janeiro. It is interesting to note that the relationship between these two groups prior to the musical event is described my Matthew as needing repair. However, performing together appeared to not only have brought them together to create together, but also improved relationships after the event.

Within the same theme but from a broader perspective, Matthew also discussed in his interview his work with the arts and the homeless. He describes the use of collaborative arts as a way to provide a platform or a group of people often alienated by wider society. Below he describes a particular event that highlights this:

"...we wanted to give a platform to homeless people. Olympics and big sporting events always have a cultural program. There tends to be. I suppose a feeling like the streets need to be cleansed of unwanted people. London 2012 felt that it was a good opportunity to actually do something that was the opposite and invite people in to be heard [...]. The performers were unanimous in feeling it was a chance to show a different side of homelessness." (Matthew)

In this particular example the homeless are identified as a separate group from the wider public. In this case however, the collaborative performance is not between the two identified groups, but rather with one group performing and a second group receiving the performance. Matthew explains that this collaborative work among the homeless, provides a way for their voices to be heard as well as to show a different idea of who they are as compared to what they may be perceived to be.

Danielle's interview also provides information aligning with this theme, though also in a slightly different way. The excerpt below will demonstrate:

"I did an event for children with down syndrome and disabled youth and I never struggled with that. There was a girl in my workplace who had a visible disability and I went to her and I'm like, 'I know this might be a little weird to ask, but I noticed that you have a physical disability, a visual one that I can see, Can you tell me about your experience?

She said, 'Wow, nobody ever asked me about that and nobody ever questioned[...] and she sat there and she was telling me she had a stroke in her room and that's why she walks the way she does. So, I wrote the piece and I sent it to her. I was like, "Hey, based on the information you gave me, this is the piece that came out if it'. She cried and she said 'Wow, that's amazing [...] So I guess collaborative, that's also like collaborative". *(Danielle)*

Danielle makes a distinction between herself and those who have struggles with disabilities. This distinction however is not one that she considers negative or opposing, but rather, different. In this case, Danielle collaborates with a lady with a physical disability, by translating her experience into a poem. In other words, a sharing of perspectives takes place where Danielle as the artist, is able to express the lady's perspective in a different medium, using the information she was given, and both ladies collaborate in this way. Similar to Matthew's account, based on this lady's words, it can be deduced that her story is one that is not often heard or expressed as she states *no one ever asked me about that*. Danielle here provides a platform for this lady with a disability, by translating her testimony into poetry.

172

These three participants particularly, highlight the context of salient identified

groups being a good context for collaborative creating. Isaac and Matthew provide

contexts of salient, opposing identities coming together to create in spite of their

differences, and further illustrate that some of these differences have even escalated to

physical conflicts. Matthew highlights collaborative creating performed by one group to a

receiving group to provide a platform to spread awareness, and Danielle highlights a

sharing of perspectives.

7.3.3 A relaxed, balanced, safe space

This theme describes the environment that participants believe facilitates collaborative

creating. Participants in their own way express ideas and experiences of a relaxed and safe

space for collaborative creating to take place.

Isaac, describes the environment in which the two different school students

mentioned previously, created together.

"It was very relaxed. Most of my projects have been a very relaxed atmosphere, where people are chatting. Some people would be on their phones, or listening to music. I try to encourage whatever makes people happy. My approach is to try to create a welcoming environment where everyone can feel – Even if they've never supposedly made art before in their life. I think everyone has made art just by being, you're kind of an artist, but people don't realize that. I try to make it open for everyone. Most of the time people are chatting, drawing at the same time, making cups of tea like a family." (Isaac)

Here, Isaac describes a very relaxed environment where participants are free to create as

they please in a welcoming and open environment. Everyone is welcome, and free to

create as they see fit. He also explains that everyone in some way is an artist, even if they

are not aware, or do not acknowledge it. Similarly, Jennifer describes a relaxed atmosphere

during collaboration while working on a play:

*"I always felt everyone felt very relaxed because it was a conversation, it was very fun
[...] we always made sure that people were having fun while creating because that's such
an important thing." (Jennifer)*

Jennifer also uses the word relaxed in her description of the ideal creating atmosphere

along with ensuring that everyone is having fun. James, while describing his collaborative

experiences with singing, expresses similar views on a relaxed atmosphere:

*"When there's somebody else we try to keep the structure simple, just so we both can get
used to the order and do it well together." (James).*

James draws a parallel between the structure and the performance. From his experience, a

simpler structure helps artists involved to perform well together. Similarly, Danielle

describes her approach to facilitating collaborative creating:

*"I'm very free when it comes to the creative process, I don't like to be structured because I
don't think that's what art is personally for me. I'm more like, let's hang out, let's talk and
let's go from here…" (Danielle).*

Here Danielle mentions the idea of a relaxed, free atmosphere with little to no structure.

Danielle also introduces the idea of a safe space by discussing a trust that is built between

collaborators:

*"When you're having those little conversations its one, building that connection, building
that rapport, building that trust, and then it's also setting the foundation and precedence
of the whole vibe of your interaction with each other and the whole vibe of your
piece"(Danielle).*

Danielle also draws a connection between the atmosphere of creating and the piece that is

created. Based on her account the creating of that safe space through building trust, has an

effect and sets the tone of the artwork. Jennifer also describes the idea of a safe space more

specifically, as a place where everything is left behind:

174

"...we always felt when you came into that theatre, it was almost a bit of a safe space and it was like okay, I can leave all of that behind, we're doing this now. I can have a bit of fun, I can express maybe what I've been feeling in the last couple of days in my artwork in what I'm creating" (Jennifer).

Matthew goes more in depth about the idea of a safe space in his testimony and describes

the atmosphere and attitude of collaborators as supportive.

"Once you're in a really supportive group, everyone is just supporting each other, they're there for each other [...] There's a shared code of behavior, which everyone talks about. It stops people being laughed at if they do a solo and it's out of key, for instance. Obviously, that culture as soon as you talk about it in a group, everyone really loves that feeling like it's a safe space. A lot of artwork I think with trauma and in social welfare is about finding safe spaces for people." (Matthew)

Matthew here provides more of a description of this safe space as a place where people are

free to make mistakes without feeling embarrassed. He adds another dimension to the idea

of a safe space as described below:

"You have to create a situation where people shine as well and they don't feel something is totally impossible. Come up with a way to meet some goal and to have something that's esteemable, so you get self-esteem from doing it. It shouldn't be too easy in some ways. That balance is quite a difficult one to strike (Matthew).

Here Matthew describes the importance of ensuring that collaborators shine. They should

feel like they can do the task at hand but also that it shouldn't be too easy for the artists.

This balance according to Matthew, can help to build up the self-esteem of participants.

Isaac adds to this idea by placing some responsibility on the facilitators of collaborative art

and stating that the intention of the facilitator should also be trustworthy:

"...if it's done for the right reasons and if it's done in a way that is really in the interests of the people that it tries to involve. Like I mentioned, I think there's very, very few artists and projects that are working in this way. There's a lot that are pretending to be working this way, but unfortunately a lot of times it's for PR purposes. It's for institutions to advertise what they're doing as charity work a lot of the time, and they employ really safe, kind of cheap, very unchallenging projects. I think that the true practitioners that are really out there, unselfishly trying to make a difference are very few and far between."

Interviewer: The goal really needs to be for the benefit of those involved for there to be need for it to make a difference? There has to be that intention?

Respondent: Yes, there has to be that intention and also the approach has to be an original and challenging approach, and not relying on more standard approaches […] From my experience, you have to work in a way that really connects to people and really tries to understand what they need. Rather than, again, kind of asserting your own parameters on that community."

Matthew and Isaac both have very similar ideas here of the best atmosphere to facilitate collaborative creating in any community. Both mention the importance of a balance between challenge and ability, as well as creating an atmosphere where people shine without placing one's own expectations or barriers on the people involved. Matthew takes it further and explains that the intention of the facilitator is also important as their goal should be to unselfishly be trying to make a difference, particularly in the contexts where there are conflicting identities or marginalized groups.

This theme highlights the idea of a relaxed and safe space for the contributors of the artwork. The developing of this safe space is often a part of the process as described by Matthew, James and Danielle, where participants develop a rapport and trust between each other. Isaac takes this further and places some responsibility on the facilitators, to create a safe space for creators by having an unselfish intention and ensuring that the activities have a challenge and ability balance.

7.3.4 Blending

This theme highlights the participants experiences of what takes place during collaborative creating. Each participant in their descriptions of experiences of collaborative creating, in their own way describe a process of blending of everyone involved and what they have to bring to the end project. Danielle articulates this very clearly in her description:

"...what we're doing is taking our brokenness, putting it on a table, and then blending it all together with our words or with music or whatever. So, it's such an intimate thing when you're putting to my expression of something and your expression or your testimony and my testimony and putting it and making it into one piece. There's definitely a level of intimacy, a level of closeness. You get to see how they felt about that situation, how they feel. (Danielle)

Danielle describes the process of creating together as a very intimate process. She

describes herself and co artists as sharing their brokenness through the artwork and

bringing it together into one work of art. She continues to describe the intimacy of

collaborative creating:

"There's times where I would be writing with somebody and we cry together. We actually took in like, "Whoa, we went through that." We're processing it while we're writing. So it's definitely the intimate moment. There's also sometimes where you guys don't click. I went through this and you didn't go through this, so how do we find a common term? How do we find where it's like, "Oh, I can recognize that feeling or I can understand that feeling." It's definitely almost like a mini-relationship where you guys have to work together. Just hope that the performance is-- that cohesiveness is shown in the performance" (Danielle).

Here Danielle describes physically becoming emotional while creating together. Herself

along with her co-artist are able to process various things that they went through during

collaboratively creating. She also describes moments with co-artists with whom she did

not share commonalities in experiences and explains that in such a situation, the artists

must work together and compares this to a relationship wherein they must work to find

common ground. This process of blending, sharing, expressing and coming together is also

reflected in the level of cohesiveness in the performance. Danielle uses the word *hope,*

which indicates that it is a goal that the performance reflects cohesiveness. Isaac further

adds to this idea of blending during collaborative creating and describes the process as

magic.

"Everyone is channeling-- They're channeling each other's thoughts. You often come up with a product that's unexpected. I always like to say it ends up being more than the sum of its parts. It kind of transcends. My experience always with collaborative art is you're

177

working, and oftentimes, when it really works, everyone latches on to the same idea. Somehow, this product emerges, whether it's a big drawing or a canvas or a video or whatever. It emerges often without people realizing that it's emerging, and just kind of creates itself. It is always a surprise for everyone. There is that kid of magic with collaboration".(Isaac)

Isaac explains here that during collaborative creating, everyone involved takes on the same idea and the work of art that emerges simply becomes, often without the participants being aware of it. He describes the idea of sharing each others thoughts as a part of the process which is ultimately expressed in the collaborative piece. James and Jennifer similarly describe the idea of blending more succinctly. James explains the collaborative creating process as:

"...giving a small piece of who I am and then giving a bit more and then realizing the acceptance". (James)

From his own perspective, James sees himself as giving of himself during creating. A process of giving of himself little by little, and realizing the acceptance of those pieces as it comes together with the other artists in the final work of art. Similary, Jennifer adds:

"...When you're in a project working in a group, you're pulling on everybody's strengths." (Jennifer)

For Jennifer, the blending that takes place during collaboration is an amalgamation of each artists strengths. Milly however, also discusses weaknesses in her testimony:

"We're either reacting to them or we're active in them. Over the years I've grown to appreciate artists more and more. I've also come to see their weaknesses, their own personal weaknesses, how it comes out in their characters as well. I get amazed when I see them do brilliantly in their parts. I learn from some of them. I want to get advice and wisdom from some of them [...]so we really need each other".(Milly)

Milly describes that during creating together, she is able to see the personal weaknesses of other artists coming out in their artwork. This is quite similar to Danielle's description of intimacy. Here Milly is not necessarily describing a weakness in the ability to perform, but

rather seeing personal weaknesses of the individual being expressed in their character. She also expresses amazement when she is able to witness co-artists performing well and desires to learn from them. This intimacy, exposure and learning forms Milly's experience of the process of collaborative creating.

7.3.5 The *inevitable* conflict

Leading from the previous theme which describes the process of creating is the theme of conflict during creating. Each participant mentioned the idea of conflict during the process of creating, whether this conflict was present before creating, or whether it emerges during creating. Participants describe conflict as an integral part of the creating process and some participants go further to describe the impact this conflict as on the art itself.

Previously, Isaac describes the clashing of cultures of the two different schools who had different ideas of creating art and identified themselves by the approach they were taught at their different schools. In this case, there was a salience of identity of participants before they began creating together, but the process of collaborating also highlighted this difference.

"They were exposed to each other's ideas. The City and Islington Kids could not understand the conceptual approach of St. Martin's, and Saint Martin's kids, they hated the fact that all the City and Islington kids were into video games and doing cartoons" (Isaac).

This quote further illustrates how this conflict was highlighted during the creating process. Isaac mentions that the Saint Martin's kids *hated* the type of art practise at City and Islington and they even go further to label the other groups practice as "not art".

"One group would be like, 'well that's not art'. Then the other group would be like, 'Well that's just silly art'.

Both groups had negative conceptions of the other's type of art practice and were identified to their own group by their own art practice which they considered more superior. However, very simply, Isaac as the facilitator explains to the students,

"Well let's just think about how all these forms of art kind of work together'. It all came out on the canvasses". (Isaac)

Isaac describes a process here, where the artists during the process of creating, were able to establish their differences once they were in a position to create together. However, in spite of these differences, they were able to explore ways to collaborate with these different ideas of art and create a collaborative piece with everyone's input. Similarly, James describes conflict emerging during the process of creating together:

James: *"It was more, 'Okay, your process in my opinion wasn't the righter process and you thought the same about my process'. The conflict was created because of that."*
Interviewer: *Okay. Did it work out? Were you able to work through that?*
James: *Yes.*
Interviewer: *Okay. Was that working out as well through the process of creating together?*
James: *As things progressed, the tension eased, and things got better.*
Interviewer: *In this case then, would you say the conflict was a part of the creating process?*
James: *I never really looked at it that way, but I could see that, I could see that perhaps the-- I guess in general, a conflict could help the creative process in some way or maybe the emotion, I think helps to express whatever you're trying to express.*

James describes a clashing of ideas of the correct way to execute a musical performance together. There was a conflict with other artists over the best way to perform. However, James mentions that as they continued working together, things got better. He even takes it

further to suggest that the conflict assisted in the creating process and the emotion from the

conflict in some ways is expressed through the artwork. He continues:

"I would say the conflict was caused because of that process and just so because we were able to work through it. We were able to have that result." (James)

More clearly, James attributes the conflict to the creating process, and as a result of being

able to work through the conflict during collaborative creating, they were able to have a

result that all participants were happy with. Jennifer also describes the emerging of conflict

during creating from her own experiences:

"Everyone always has some kind of drive, some kind of passion. Sometimes it can cause conflict when people are so passionate that they don't see beyond their thoughts if that makes sense.

It's happened before when you're so strongly passionate about an idea or you so strongly believe that one thing is right that it can cause conflict within the group as in disagreement of ideas and how things should be done and how things should not be done. It's not necessarily a bad thing, it also just shows how passionate people are[..]

It's bound to happen all the time, I'm sure all artists at some point have experienced this because especially when you're working on a project or a piece of work that relates to you or that's close to your heart or connects you to something maybe personal experience, you end up getting so caught up in it because you're so passionate about it. It has caused conflicts but again at the same time, it's not always necessarily a bad thing, I think".(Jennifer)

Jennifer explains that passion for an idea can be blinding when working in a group, and

this can often cause individuals to become so caught up in their own ideas that they

become closed to the ideas of other members of the group. Interestingly however, Jennifer

explains that this emergence of conflict is not necessarily a bad thing. She explains this

further:

"We all wanted to make it the most amazing thing we could. Like I said in the end when there were situations, where there were conflict, sometimes you grit your teeth, sometimes you do have to maybe just argue it out a little bit, but in the end we created something that we were all so happy with […]If you need to have a bit of an argument or hash it out but then you just move on, because there's no point on holding on to things. I think that as well helped to make the end play just something, we were all so proud of and really proud to share with other people as well." (Jennifer)

181

Jennifer describes here that the conflict that emerged during the process of creating was *hashed out* during the creating process. Jennifer also believes, that this conflict in some way affected the end result in a positive way, in that they were all proud and happy with the collective work they had accomplished, and were also very happy for the artwork to be received by others. Both James and Jennifer believe that the conflict and working out the conflict during the process of creating had a positive effect on the end result. Danielle also describes the inevitability of conflict emerging during the creating process based on her own experience:

"Anytime you get that intimate with somebody, there's going to be issues, there's going to be conflicts. Whether it's preexisting conflict, whether it's a, "I want this part in the piece versus this part," or, "I don't think we should add that," whatever the case may be, there is going to be some type of butting heads. What I try to keep in focus the best way that I can, is remembering the greater good, and the greater good is the message of that piece." *(Danielle)*

Danielle explains that conflict is inevitable in collaborative creating and can be both pre-existing as well as emerging from the creating process. From Danielle's perspective, in spite of this *butting heads* the goal prevails and that is spreading the message through the artwork.

"It's like, yes, it's art and yes it's expression, but once you start going in front of a crowd, it's no longer just expression, it's preaching. You're spreading a message, some type of message to somebody that could either hurt them, destroy them, break them, or build them. If we're in that environment, there cannot be a sense of pride or cannot be negativity in any way [...]

Our goal and our objective is to build people. If that's the focus then and when you compare any petty issue to save another life, it doesn't compare at all" *(Danielle).*

Danielle stresses the importance of the overarching goal which is to spread a message through the artwork that would build people who are receiving the artwork. According to Danielle, other petty issues do not compare to the artwork and the impact it could potentially have on others. Milly describes a conflict taking place during the culmination of a play. She explains that cliques formed during the rehearsals of the play and she was in

a position to work with an actress with whom she did not get along with. This conflict

however, appeared to have a positive effect on the artistic performance. She is able to

translate the actual conflict into the roles that they had to play together:

In the play, my character was in opposition to another character. There was Milly and then the character of the jail guard, so there's Milly and there's the jail guard. The jail guard is in opposition to the president but Milly was also in opposition to the person playing the president in real life. It was hard to separate the two at first […] When Milly took that opposition to the guard and gave him those ugly feelings then I was able to better control the raw emotions that were coming out on the character […] I learned to channel my ill feelings towards the person in the character and actually it didn't come out into me. The energy came out when I had to dance.
Interviewer: You said that the negative energy didn't come out-
Milly: In a negative way.
Interviewer: In a negative way.
Milly: Yes. It came out in a positive way because the lines that I had, which allowed you to be angry were very minimal but the lines that I had that I was required to be happy and joyful and playful were a lot more, and so all of that negative energy had to go […] It was so free and so liberating . I no longer cared that this person was being not nice. I complained and all of that stuff, but at the end of the day, that didn't matter. What mattered or what I was proud of was that I was able to go on this stage as being liberal, be free through that, through the singing, through the silliness and the playfulness and not care.

Milly clearly describes here the artwork acting as a channel for her negative feelings or

energy toward the other member of her group. She is able to translate that negative energy

into her artwork and express it as not only something positive, but something that she is

proud of as she executes that on stage with her fellow collaborators.

Through this theme, participants describe the idea of conflict. This conflict could

be before the creating, or it could also emerge during the creating process. The similarity

that emerges is the expression of this conflict through the artwork. Participants describe

the importance of the artwork and Jennifer, Isaac and Milly express that the conflict can

even have a positive effect on the art as the emotion that arises through the conflict comes

through in the art. Collaboratively creating provides a platform to express the thoughts and

emotions that arise during the conflict. It is also interesting to note that in spite of

differences, whether pre-existing or not, all collaborators come together for the goal of creating a work of art.

7.3.6 Openness, Impact and Release

This overarching theme describes the participants perspectives on what makes a collaborative art experience successful. Through analysis of the interviews, participants discuss openness as a prerequisite for a successful collaboration, and describe positive impacts on the receiver or audience as well to be a measure of success. On a more personal level, artists also describe the release of stress as an element of wellbeing that collaborative arts have a positive effect on based on their own experiences. This section will discuss each of these ideas using extracts from the interviews to highlight the themes. Isaac provides a clear narrative highlighting openness, impact on self and impact on the receiver in his ideas of a successful collaborative experience. With regard to openness, he states:

"I think it largely depends on the people involved. I think people have to be open and they have to have an appetite for new things. Even if they feel like they're not good at art or they've never made art before, whatever, if there's that openness, then you're more likely to have a successful project […] Times that have been successful is when people are open and when they're just willing to let go of these preconceptions that they might have and just try to have fun"(Isaac).

Isaac explains the importance of collaborators to have an open mind and willingness to try new things in order for a collaborative art experience to be successful.Jennifer also provides insight on the idea of openness and describes it as something good to be brought to a collaborative project that will help make the project better.

"I always think being open minded is such a good thing you need to bring to a collaborative project. You got to remember this, there's other people in the world, there's other people in the group. Like I said before, you may not know it before but the communication thing, expressing your ideas bouncing off one another, you'll also identify if certain people are stronger in certain elements and in certain ways. With being open minded as well, the idea of nothing gives a wrong answer. Communication, being open-minded, and just having a good drive and passion, because that just makes everything so much better I think."(Jennifer)

Similar to Jennifer's account, though not using the same words, Milly agrees with the idea of being open to work with different people:

"Yes, definitely because you're dealing with people from all over with different backgrounds. You have to be willing to work with them."(Milly)

Danielle also describes the idea of having an open mind as integral to collaborative creating, and also includes that being open to creating together has wonderful benefits inclusive of world peace:

"....art is conflict resolution. If people have that open mind to accept it [...] if you interpret art as something beautiful in its sense, coming from a creative, then you realize that it has the ability to create world peace as extra as that sounds, but that's how powerful it is." (Danielle)

Each participant in their own way describe openness as an important part of collaborative creating as participants acknowledge this as an acknowledgement of other people and their potential differences that are being brought to the creating table. With openness as a pre-requisite, participants also describe impact as an important part of collaborative creating. Isaac describes impact on both creators and receivers of the art as a measure of success:

"...if there was some positive outcome both for the people involved and for a larger cause that might be putting on an important exhibition where more people are able to see the artwork that we've created, so it can kind of spread a positive message." (Isaac)

Spreading the message of the artwork for others to see and experience is also considered

an important aspect for Isaac, along with any positive outcome for the artists. Danielle also

describes impact, but more specifically on the audience,

" I would say impact, that's the objective. When I'm writing in general its', Does it empower? Does it change somebody's life? Some pieces, it's more like I want everyone to clap after because the lyrics were very powerful [...] There's some poems the reaction you want it complete silence because it's not one of the poems or a song that you analyze yourself and you say, 'Whoa where am I? Okay this is where I am now'".(Danielle)

Taking the idea of impact further, Danielle discusses not just impact, but an appropriate

reaction from the audience which is an indication of that impact. Danielle also brings

another element of impact, in which she describes impact on the audience while

collaboratively performing as something that caused her to be humble toward fellow

collaborators with whom she was previously in conflict with:

"After seeing the impact of everybody's piece on every individual, I had to go back to them and be like, 'I want to apologize,' because I have to recognize what we're doing here and what we're dealing with."(Danielle)

Similarly, Milly explains impact as an important part of *effective* art. She explains:

"...it's when the art is appreciated, when it's understood too. It may not always be the message intended by the creator, but when the message is gathered from it, that message alters or enhances the receiver's life in some way"(Milly)

Matthew also describes impact on the public as an important part of successful

collaborative arts and describes an instance with a project that he worked on,

"We created this mural of a Doodle on Ducie Street, which was created by 30 homeless artists, and 20,000 people see that each week [...] It got tagged by a graffiti artist, and that evening, someone came and cleaned it off. I think it's really the public love seeing the courage that the artists had in wanting to tell their story and showing a different side of homelessness. There's a lot of respect for it". (Matthew)

Matthew explains here the large number of visitors who came to see the collaborative

work and the effect of the piece was providing onlookers with another perspective of

homelessness that they may have never thought of before. The impact of the piece is also

shown in the wiping off of the graffiti to preserve the original artwork. Matthew provides

an experiential example that highlights the idea of impact that is expressed by the rest of

the artists in this study.

Participants also discussed the idea of wellbeing by giving personal examples of

how creating collaboratively has had an effect on them, as well as what they have

witnessed with other artists. Isaac provides an example from the youth involved in the

London riots for whom he and his colleagues provided an opportunity for them to

collaboratively create in his own home. He describes that this opportunity gave them an

outlet to release angry, negative energy:

*"They were just looking for any opportunity to just cause chaos and cause trouble and
steal, and basically do everything that they probably shouldn't be doing. They ended up
stealing a lot of stuff from our house I remember, but at the same time they had this energy
that I think they were able to translate into creative energy when they were around
us.."(Isaac)*

Along with this, Isaac describes his experiences with people who are marginalized in

society, and explains that confidence and belief in oneself as other aspects of wellbeing

that are developed with collaborative creating:

*"...they're going to gain in confidence and they're going to believe that they can contribute
to society in the way that a large part of society tries to tell them that they can't." (Isaac)*

Similarly, Matthew describes his experiences of collaborative arts and homelessness and

explains that through the tool of collaborative creating, participants grow in self-esteem

and develop more positive thoughts about themselves:

*"I think if you are used to being a problem or you're part of a class system, which is
problematic in some way, it can be quite easy to never get encouragement for anything or
never be told that you're anything but a homeless person. There are a lot of feedback that
all of these art projects get is about. It's connected with our findings around agency. I'm
more than the sum of my problems. I do have skills and talents."(Matthew)*

187

From his own experiences working with collaborative arts, Matthew explains that creating

together has the ability to change someone's life:

"*It can literally change someone's life, from someone who feels like they're no good and just their mental health is suffering in their lives to getting out more meeting people, getting back in touch with friends and family, being able to put themselves on housing lists or having the courage to go to the doctor more. That happens quite a lot. Then if they're interested in employment, that can happen from-- You can trace it back from building someone's well-being." (Matthew)*

Matthew is able to describe practical benefits from collaborative creating on the wellbeing

of the homeless, and he stresses that the group aspect is important and plays a big role in

the improvement of wellbeing:

There's something that's as a human right that's within us all, a creative part of us, which is very important for our well-being to access. If these arts can create that space for that creativity, I think there's something about the group dynamic, which enables that sort of supportive structure where you are, being reminded that what you're doing is making other people happy and what you're doing is great. I think of an analogy of a bundle of sticks. It's quite easy to break one stick, but if you bundle together is much harder to break (Matthew).

Jennifer gives a more personal description of the benefits of the arts on wellbeing. She

describes art as escapism and explains that while creating she has no stressful thoughts:

"It's freeing because it just takes me out of that stressful environment. It's just like for the next hour, don't think about anything else just do whatever. Especially if it's a stressful environment, it's good especially if I'm drawing or painting. For me to take that stress or any feelings or emotions that has caused that stress to get it out on that paper, to get it out on that canvas, to let it be whatever it's going to be with the colors and the textures and all of that, for me like I said, it's very freeing. It helps me unwind and de-stress because it's a form of releasing those emotions. We all know if you don't sometimes release those emotions or deal with them, they just build up and it makes the situation worse. For me doing the art, for example, it's a way of releasing that. I'm not building things up and letting the situation get worse." (Jennifer)

Jennifer directly describes creating as a means of releasing stress and negative emotions.

While she is creating, she doesn't think about whatever it is that is causing her to feel

stressed and her focus in the creating of the art allows her to express and release those feelings. Danielle gives a very similar account of the therapeutic nature of creating:

Art saved my life [...] art gives that ability to like release where it gives me opportunity to think. See my thoughts out loud on paper, read it back to me, recognize how I'm feeling. It's my therapist. Asking questions, provoking questions that maybe like I haven't understood about myself or I was too scared to ask myself [...]What I also realized how therapeutic it is not just for the individual who writes it but the individual that receives it on the other end to know that, "Hey, I am going through that too." Like, "What?" "I'm experiencing that." Or, "I think that exact way" (Danielle).

Danielle also describes creating as an opportunity to release and describes art as her therapist. In a collaborative setting, she describes helping her friend through a breakup, and identifying that art was useful in helping her friend to gain closure as well as helping her to identify and process how she was feeling:

"To identify how they feel is also very powerful. Well, I think art pertaining to wellness is essential. For sure" (Danielle).

This theme provides testimony from artists explaining what they regard as a successful collaboration. Openness is considered essential for participation, impact on the audience or receiver is also valued, and positive outcomes for various parts of ones wellbeing has been described as an effect of collaborative creating.

7.4 Discussion

The first theme, *my art, my own*, highlights that individual creating from the artist's perspective is a very personal experience that often leaves no room for others, and provides freedom and total control over the outcome of the artwork. This theme, if only by contrast to the other themes, highlights the differences that take place when creating individually as opposed to collectively. The focus appears to be solely on the self and how the self chooses to express him/herself through the work of art. It is interesting to note as it relates to flow, that one of the elements of being in flow is a loss of self (Czikszentmihayi,

189

2009). However, in this case, the creating process on the individual level appears to elicit more focus on the self. It could be argued however, that this loss of self does take place in the form of releasing into the artwork. Participants express a freedom to create in any way they choose and express that the artwork procured, is a representation of themselves. It could be argued, that the artwork created individually, could be an artistic representation of the loss of self, that is said to take place during flow.

The contents of 4 of the identified superordinate themes can be directly related to descriptions of group flow (Sawyer, 2015) and can be seen to be indicative of its presence in the collaborative creating that has been experienced. For example, the third superordinate theme (A relaxed, balanced, safe space) describes the facilitation of creating art and a balance between challenge and the ability of the artists is described as an important aspect for collaborators. Very similarly, Csikszentmihalyi (1975, 1990, 1992) describes one element of Flow as an attainable challenge. Another aspect of group flow as outlined by Sawyer (2015) is the balance between control and flexibility toward the movement and direction of the group. This description is very similar to the description of a relaxed atmosphere as highlighted by participants. Danielle describes having the freedom to talk and create rapport as an aspect that leads toward the movement and direction of the piece based on everyone's involvement and discussion. It is interesting to note as well that each participant mentions having conversations with each other as a part of the relaxed atmosphere. Three of Sawyers' (2015) elements of flow include communicating with each other, listening to each other and building on what is being said. Participants descriptions of the relaxed atmosphere facilitating collaborative creating includes these elements of flow and would be described as an observable quality of being in flow (Gloor et al., 2013; Sawyer 2006).

In addition, Matthew and Isaac discuss the importance of providing a space for each person to shine, as well as to ensure that the facilitators do not impose their perspectives on the artists. Sawyer (2015) describes equal participation as an element of group flow which the participants allude to in their descriptions of the importance of everyone having a say and in the final outcome.

The 4th theme, *blending*, and the 5th theme, the *inevitable* conflict both highlight the element of flow described by Sawyer (2015) as the blending of egos. The participants describe the collaborative process as blending themselves, and in their descriptions of the conflict, the conflict itself is as a result of the coming together of strong ideas and perspectives of how the art should be. A sense of pride is also described as an aspect that is acknowledged and humbled through the collaborative creating avenue. From the 4th theme in particular, participants also explain that a part of working through the conflict is the end goal which is the artwork, or the message being expressed through the artwork. This of course places a great importance on the common goal, which is also an element of group flow as discussed by Sawyer (2015).

Though not directly discussing flow as a phenomenon, participants have described various elements of flow that take place during the creating process, which provides some evidence of collaborative creating as an avenue for group flow, outside of just musical performances. It is also interesting to note that the idea of conflict, whether before or during the process of creating, is worked out through the focus on the task and in the case of art is able to be expressed into the task.

As it relates to conflict, as expressed previously in the literature review, one of the aims of this study was to investigate collaborative creating in the context of two groups with opposing identities. What is currently lacking in previous research is the application of collaborative creating in such a context. This study is not looking specifically at

intergroup conflict, but rather focusing on the salience of identity while creating that could have an effect on intergroup conflict. The first theme in particular provides information to add to the literature regarding collaborative creating. Isaac and Matthew in particular, have provided contexts in which participants have had opposing identities, yet in spite of this were drawn together in a collaborative creating context, and were able to work together peacefully. This study begins to address Lebaron (2014) and Hyouen Bang's (2016) recommendation for further studies exploring collaborative creating in the context of opposing groups. What becomes evident from the testimonies, particularly of Isaac and Matthew, is that the arts provide a platform in which the reason for the conflict, or difference in identity does not matter. Previous research shows that participating in collaborative arts enhances social identity (Neel and Denith, 2004). Collaborative art projects have also been used successfully to bring the community together, to work toward completing a shared goal (Lowe 2000, 2001). However, this previous research was in the context of bringing individuals in a community together, rather than two identified groups. This study provides some indication, that the same results can be anticipated in a context of opposing groups. The first theme particularly, provides some evidence of the collaborative creating activity creating a space through which a new social identity could be formed, in spite of pre-existing opposing identities. As discussed in the literature review, social identity refers to a person's concept of themselves based on group membership (Tajfel, 1978, 1981). The participants highlight salient opposing groups (homeless vs. police; high art school vs .community art school; pro-brexit vs. refugees) as well as representation of different groups (people living with visible disabilities and people living without visible disabilities) and the common theme present in all testimonies is the ability of collaborative creating to bring everyone together under one identity – artists.

It is important to note that there are mixed discussions about what takes place after creating together. Isaac reports that the children from the different art schools did not ever begin to like each other, however Matthew reports in the case of the homelessness and the police that the collaborative creating exercise made a positive change in a previously damaged relationship. Matthew also reports that the homeless group that performed for the wider public felt good and purposeful as a result of participating in collaborative art and that the wider public were able to appreciate a perspective that they were not aware of before. Very similarly, Danielle describes the appreciation she received from the lady with a disability for this medium through which her voice could be heard. This can be explained by previous experiments on perspective giving and taking as describes by Bruneau and Saxe (2016). The experimenters found that perspective giving is most effective for the non-dominant group and perspective taking is most effective for the dominant group in a changing of attitudes toward the other. The medium of a collaborative artistic performance provided a platform for this exchange to take place and the results are in agreement with Bruneau and Saxe (2016).

The final theme describes what participants consider successful collaborative creating. Openness of participants, which is a willingness to work together; impact on the audience, which is the artwork reaching and affecting the receivers in some way; and release, through which participants describe the positive effects that creating together has had on the ability to release stress, gaining confidence and self - esteem, feeling more purposeful and communication with others. These results of collaborative creating are explained by the aforementioned artist who each explain a quality of art to be the breaking down of barriers (Bukowski, 2004; Tolstoy, 1894) between artist and receiver. However, what this study also shows is a breaking down of barriers between collaborative artists.

7.5 Conclusion

This IPA study explores the experiences of artists in collaborative creating. The testimonies describe the coming together of artists, often with differing, opposing identities to focus on a collective goal of creating together. Participants also describe various elements of group flow as a result of the collaborative creating experience. The focus and immersion on the goal, which is essentially the definition of flow, overshadows any differences as well as allows for a platform to work through any conflicts pre-existing or occurring conflicts. There are also benefits to the wellbeing that participants express are a result of the collaborative creating process. This study adds to a very little researched area and provides some evidence of the viability of collaborative creating as a tool for unifying identities that consider themselves opposing, different, or even in conflict. This study lays a foundation for future researchers to continue to apply collaborative creating in contexts of opposing identities and further explore the experiences of those involved. It would also be interesting to focus on other media of expression and note any differences, hindrances or positive aspects that some media may have over another. 3 of the participants in this study describe experiences engaging in and preparing for performance art. It would be interesting to note any differences in collaboratively creating for performance art as opposed to art with no intention of being showcased, and whether that may have any effect on openness and willingness to participate.

Chapter 8: Conclusion

This section will address each of the objectives that have been outlined in the literature review as highlighted below.

8.1 To investigate the measurement and occurrence of flow during collaborative creating.

Throughout this series of studies, the occurrence of Flow has been indicated in the context of creative activity. These indications have been measured to an extent quantitatively by using the Flow State Scale, but the apparent limitations of this instrument to capture a transitory state is noteworthy and points to the ephemeral nature of the flow state (Csikszentmihalyi, 1998) which may vanish once the activity which leads to it ends and measurement begins – a Schrodinger's Cat paradox (Hart-Davies, 2018) is potentially revealed.

More promisingly perhaps, through thematic analysis and interpretive phenomenological analysis of semi-structured interviews with participants and artists, the perception of a flow state occurring during creative activity, including collaborative creating, and its role in reducing inter-group saliency and a focus on group conflict, is consistently indicated in identified themes and also appears to be borne out through semiotic analysis of the artwork created.

From using the Flow State Scale, in study 1 and 2, using guidelines from Smith and Eklund (2002), there were able to deduce are indications of the occurrence of flow during collaborative creating. These studies add to previous literature on group flow in a collaborative artistic setting (Hart & Di Blasi, 2016) in that there is some evidence

provided that collaborative creating of visual art is another artistic avenue in which flow can occur.

Study 2 provides evidence from the thematic analysis that suggests that the collaborative creating activity facilitated some aspects of group flow from the descriptions of participants' experiences. More specific to the research question, Sawyers' (2015) 'blending of egos' was relatable to the theme of unity, and this theme was specific to the creating conditions. Other aspects of group flow include a goal providing focus, communication, equal participation and close listening.

The semiotic analysis from Study 5, provides some evidence that is comparable to observational descriptions of what happens when a group is in flow. Armstrong (2008) describes synchronicity of movement as a consequence of being in group flow. From the semiotic analysis, there is evidence of synchrony of drawings. In other words, participants seem to all add similar ideas to the group drawing, which is apparent in the repetition of snakes in Image 8 of Study 5. Perhaps in the case of visual arts, group flow can also be observed in patterns across the drawings.

Themes identified by the interpretive phenomenological analysis (IPA) also appear to indicate the perception of group flow as participants discuss and reflect on their experiences engaging in collaborative creating. Testimony from the participants corroborate with aspects of the previous studies to provide support for the occurrence of group flow during collaborative creating. For example, IPA identified the theme of blending, which is the participant's descriptions of what takes place during the creating process. The theme Unity, from the thematic analysis from Study 2, describes what took place as opposing groups came together to create. Not only are these themes very similar, but they both are descriptions of what Sawyer (2015) describes to take place as a result of group flow.

Overall, the differing methods of measuring flow, arguably meets this study objective, by providing evidence that indicates the occurrence of group flow by means of collaborative creating.

8.2 To investigate perspective giving and taking during collaborative creating and any potential effects on the occurrence of flow

As illustrated in Study 1, perspective giving and taking appears to have no effect on levels of flow when this is measured quantitatively. In spite of this however, there is some valuable information that can be derived from this study. Firstly, it should be noted that perspective giving and taking is a method, that due to its nature of expression, can be seen to be facilitated by an artistic medium. Previous researchers have used writing as a medium through which to exchange perspectives (Bruneau and Saxe, 2006) and role playing (Galinsky & Ku, 2004; Galinsky & Moskowitz, 2000). This study has adapted the method using visual arts. Participants not only expressed the views of the opposing group, but they were able to express the opposing views in a collaborative piece with the opposing group.

Secondly, the semiotic analysis from Study 3, shows that the perspective giving and taking variable had an effect on the ease at which participants were able to create together. Not sharing perspectives seemed to have caused a process of individual expression through the artwork first, before coming to a final collaborative work. However, the sharing of perspectives allowed for a more cohesive process from the beginning of the creating process. It is interesting to note here, that from the thematic analysis, participants described that the need to express was satisfied in the creating conditions. It becomes clearer through the artwork, particularly in the non-perspective giving and taking condition, that the artwork provides an avenue through which participants felt that they could express their differing views, and this process enabled

them to eventually be able to procure artwork together, and more significantly, with themes of unity and peace.

8.3 To investigate potential implications of flow facilitated by collaborative creating, on identity, conflict and wellbeing

This section will focus on the wider implications and relevance of this study in the field of research.

8.3.1 Implications of flow facilitated by collaborative creating on identity

With regard to identity, a common theme that has emerged across studies, is that of unity. Unity has emerged specific to the creating task in study 2 and 3, and again is brought up in the blending theme of study 6. Participants describe feeling united with fellow collaborators as a result of the collective effort in creating the art-work. In other words, the work of art provides an overarching goal with which they all identify. This blending of ideas, identities, even in an opposing context is encapsulated by the blending of egos aspect of group flow. Not only does collaborative creating appear to facilitate flow, but the process of this blending of egos can be physically observed through the work of art. Moreover, the artwork provides a physical memoir which itself holds an identifying part of each individual in a collective, shared image.

Thus, the implication of this series of studies, is that group flow facilitated by collaborative creating, enables a group identity to be established, even if only for the duration of the creating exercise.

8.3.2 Implications of flow facilitated by collaborative creating on conflict

This discussion follows on from the previous discussion regarding identity. Study 1 and study 6 both provide contexts in which participants are either in or have observed groups of opposing, salient identities coming together to create art. As a consequence of this, themes of unity are procured in Study 2, and themes of peace derived from the semiotic analysis. The implications of these findings suggest that collaborative creating provides a means, not only through which participants can develop a shared identity, but through which peace, togetherness and humanity can be expressed through the artwork. If, as described by artists in the literature review, art is an expression of the self (Bukowski, 2005; Merton 2008, then it can be argued that expressing themes of peace and unity are an expression of the participants feelings and ideas while they are creating. This peace and unity, based on testimony of participants, was not present at the beginning of the study, but emerged after creating together.

Study 6 provides examples of contexts within which this approach would prove beneficial. Examples such as the Jewish Palestinian band, and the long-standing Pro Brexit community members with a group of immigrants, provide contexts which show members of opposing groups coming together to create. There are very few studies placing collaborative creating in the context of intergroup conflict. This study provides some evidence to show that collaborative creating, through the mediation of flow, can potentially create an overarching identity that could result in peaceful reconciliation. This supports previous research (e.g Gaertner et al., 1999) where an all-encompassing identity driven by a common goal was a significant factor in facilitating reconciliation between groups.

8.3.3   Implications of flow facilitated by collaborative creating on wellbeing

Study 3 implies that the higher the levels of flow the lower the distress and worry dimensions of stress. These results are based on collaborative creating as the task. This information is corroborated by participants from the IPA Study, who explain that creating provides an avenue through which they can focus on the task and release any stress through their chosen medium. Participants in the IPA study also describe the positive effects that creating together has had on confidence, self esteem, purpose, stress and communication with others. Just as the correlations in Study 3 indicates a significant relationship between flow and aspects of stress, the IPA study also reveals participants describing the release of stress as a result of focus on the task. Participants also describe confidence attributed to participants feeling as through they are able to contribute something to a wider cause which can be attributed to equal participation. Communication during creating is also an attribute of group flow which participants describe as a confidence booster that encourages people to speak more to others and reach out to family members they may not have spoken to in a while. Though the implication of flow may or may not be considered palpable, collaborative creating clearly portrays positive effects on wellbeing which is in line with previous research (Biscoe & Wilson, 2015; Manning, 2018).

8.4 Overall Reflection

It is important to acknowledge that this series of studies is not a standard series of studies, but rather uses a variety of methods to explore concepts and discover potential

new things about concepts such as art and flow. Due to the lack of research currently on group flow, this research considered a more exploratory approach, leaving the door open for potential nuances or novelties that may not have been expected.

It is interesting to note the ways in which these studies support each other, particularly as it relates to the research question.

Diagram 2: Diagram of Studies
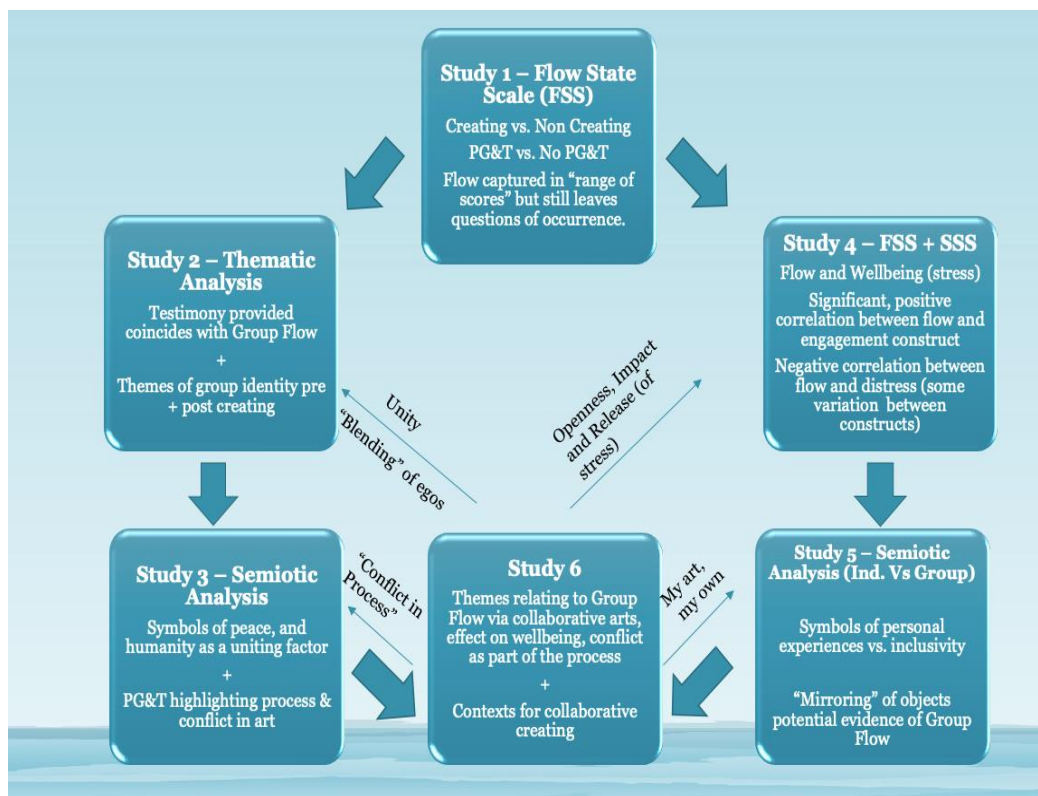
The first study provides some evidence of flow occurring during group creating via the flow state scale. Study 2, highlights from the perspectives of participants, element of group flow that may have occurred during collaborative creating. Elements which were not able to be deduced from the flow state scale such as blending of egos and communication with each other. Though not speaking directly about flow itself as a phenomenon, participant's

descriptions highlight elements of being in group flow. In support of this, the 3rd study employing semiotic analysis, shows a visual representation of the blending of egos as described by Sawyer (2015). This study also shows themes of peace, unity and humanity within the artwork, from a group of students who initially identify as belonging to opposing groups. The first three series of studies provide a flowing narrative of various aspects of flow and identity salience that support each other, but tell one story of flow facilitated by collaborative creating, and the salience of identities of participants.

The last 3 studies also provide a similar narrative, focusing specifically on creating in an individual versus collaborative setting. Study 4 provides evidence suggesting no significant levels in flow scores across individual versus collaborative flow scores. However, there is a significant, positive relationship between flow and the engagement construct of stress and a significant negative relationship between flow and distress, with some variation between constructs as highlighted in section 5.3. Further analysis of the artwork provides information that could be related to flow. In the individual creating condition it is arguable that the artwork itself could be a physical manifestation of loss of self, as the self's memories, feelings or ideas are manifested unto the canvas. In the group creating condition, synchronicity is physically expressed through repetition of the same objects created by individuals on the canvas. There is argument here that potentially group flow could be an observable quality within the realm of visual art. It is also interesting to note that participants works of art in the individual condition are completely personal and significant to the self, whereas the group collaborative works are intentionally inclusive of all participants.

The IPA study provides a culmination of the previous studies, and corroborates findings from studies 2, 3, 4 and 5. The theme *my art, my own*, provides some similarities to the expressions of personal memories, experiences or reflections that have been

demonstrated in the individual creating condition of Study 5. Similarly, the theme *blending* which artists describe during collaborative creating is an observable quality of the art from the collaborative creating conditions within which each participant contributed to the overall final piece of work in Study 5.

The theme Openness, Impact, and Release describe the idea of creating providing an avenue for the release of negative stressful feelings which bears similarity to the results from Study 4, which suggest that an increase in flow during creating, results in a decrease in the distress construct of stress.

The theme *the inevitable conflict*, procured from the IPA study, can be compared to the results from the semiotic analysis of Study 3. The absence of the perspective giving and taking variable in study 3, show through the artwork, a process individuals expressing their own personal perspective before coming together to create one final work of art. Participants in the IPA study describe this conflict during creating that occurs as individuals with different ideas, perspectives and passions, come together. Through this process of conflict, they are able to collaborate and create a work of art that reflects everyone involved.

Similarly, the theme *blending* from the IPA study, draws on similar concepts describes in the *unity/togetherness* theme from the thematic analysis in Study 2. Participants in both studies describe the artwork as a means through which they were able to connect and feel united with the other members with whom they were creating.

Overall, this series of studies adds collaborative arts as a tool not only for facilitating group flow, and the benefits associated with flow (release of stress, increased self esteem), but also as a means of identity salience within a context of opposing identities, which was the aim of this research.

8.4.1 Bias and Reflexivity

Four of the studies in the overall thesis are qualitative in nature, and require analysis on the part of the researcher. Reflexivity, is considered an essential part of qualitative analysis and refers to the researcher being aware of their own thoughts and ideas towards the topic of research, and any influence that may have on what is being studied (Probst & Berenson, 2014).

Braun and Clarke (2016) stress the importance of reflexivity during thematic analysis, which is also reflected by Smith et al (2009) as it relates to Interpretive Phenomenological Analysis. Similarly, in semiotic analysis, it is up the researcher to decide when the analysis stops (Penn, 2000), which also highlights the importance of reflexivity throughout the analysis process, with much of the decision making up the researcher. As a result of this, it was imperative for the researcher to practice reflexivity throughout the studies, and maintain awareness of her own potential expectations or biases and expectations. As a result, a summary of these reflections is included in Appendix AF.

8.4.2 Impact and Future Research

The studies from this thesis have highlighted potential areas of practical impact that collaborative creating could have in real world settings. Participants from the IPA study, have highlighted potential contexts for implementing collaborative creating between conflicting and/or different groups (Elite art school vs. Community art school; British community vs. immigrants; homeless vs. housed community; people with disabilities and people without disabilities). Further studies of similar nature could also encourage

government as well as private funding for using the arts in conflict and community building contexts (Lebaron, 2014; Bang, 2016).

This study also highlights the idea that the experience of flow and art-making is fundamentally experiential and lies in the tertiary mode of transformational knowledge (Stevens, 1998). Thus, the potential limitations of quantitative measurement of flow becomes evident (study 1 and 4) with the clear indications that it can be measured qualitatively and experientially (study 2, 3, 5 and 6).

Future research should possibly further explore measurement of flow through art-based approaches and further discover ways that flow can be explored through artistic expression. One of the unexpected outcomes of this study, was the visual manifestation of "synchrony" during collaborative creating of visual art. It would be interesting for further research to further explore visual and other artistic avenues, exploring further potential manifestations of group flow. It would also prudent to consider investigating experiences of people who have engaged in collaborative creating as a means of conflict resolution and gaining further understanding of effective ways this can be used to reduce conflict and promote peaceful relationships.

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Appendices

Appendix A: Situation-specific Quantitative Measures of Flow (Magyarodi *et al.,* (2013)

Author(s) and Date	Instrument	Dimensions Measured
Jackson and Marsh (1996)	Flow State Scale	- Autotelic experience - Clear Goals - Challenge – Skill Balance - Concentration on task at hand - Paradox of Control - Unambiguous Feedback - Action-awareness merging - Transformation of Time - Loss of Self Consciousness
Jackson, Kimiecik, Ford, Marsh (1998)	Dispositional Flow Scale	- Autotelic experience - Clear Goals - Challenge – Skill Balance - Concentration on task at hand - Paradox of Control - Unambiguous Feedback - Action-awareness merging - Transformation of Time - Loss of Self Consciousness
Jackson and Eklund (2002)	Flow State Scale 2 and the Dispositional Flow Scale 2	- Autotelic experience - Clear Goals - Challenge – Skill Balance - Concentration on task at hand - Paradox of Control - Unambiguous Feedback

			• Action-awareness merging
			• Transformation of Time
			• Loss of Self Consciousness
Jackson, Martin and Eklund (2008)	Short Flow Scales (Dispositional and State)	• Unidimensional Flow Construct
Martin and Jackson (2008)	Core Flow Scales (dispositional and state)	• Unidimensional Flow Construct
Novak and Hoffman (1997)	Flow questionnaire for Internet Users	• Sum of skills and challenges
		• Difference of skills and challenges
		• Flow Operator
		• Feedback
		• Communication place
		• Communication tool
		• Autotelic experience
		• Time distortion
		• Playability
		• Challenge
		• Goals
		• Feedback
		• Story
		• Concentration
		• Control
		• Flow
		• Anxiety
		• Boredom
		• Apathy
		• Absorption during work
		• Enjoyment of work
		• Intrinsic work motivation
Lee, Lee, Kim, Kim, Park & Choi (2004)	Questionnaire for measuring the flow state in a computer-situation	• Sum of skills and challenges
		• Difference of skills and challenges
		• Flow Operator
		• Feedback

		• Communication place • Communication tool • Autotelic experience • Time distortion • Playability • Challenge • Goals • Feedback • Story • Concentration • Control • Flow • Anxiety • Boredom • Apathy • Absorption during work • Enjoyment of work • Intrinsic work motivation
Kiili (2005)	Flow Scale -1	• Sum of skills and challenges • Difference of skills and challenges • Flow Operator • Feedback • Communication place • Communication tool • Autotelic experience • Time distortion • Playability • Challenge • Goals • Feedback • Story • Concentration • Control • Flow • Anxiety • Boredom • Apathy • Absorption during work • Enjoyment of work

		• Intrinsic work motivation
Olah (2005)	Situation-Specific Flow Questionnaire	• Sum of skills and challenges • Difference of skills and challenges • Flow Operator • Feedback • Communication place • Communication tool • Autotelic experience • Time distortion • Playability • Challenge • Goals • Feedback • Story • Concentration • Control • Flow • Anxiety • Boredom • Apathy • Absorption during work • Enjoyment of work • Intrinsic work motivation
Bakker (2008)	Work-related Flow Inventory	• Sum of skills and challenges • Difference of skills and challenges • Flow Operator • Feedback • Communication place • Communication tool • Autotelic experience • Time distortion • Playability • Challenge • Goals • Feedback • Story • Concentration • Control

			- Flow - Anxiety - Boredom - Apathy - Absorption during work - Enjoyment of work - Intrinsic work motivation

CALL FOR SALFORD UNIVERSITY STUDENTS TO PARTICIPATE IN STUDY!

TITLE: '"Creating" Peace: Peaceful Conflict Resolution by facilitating "Flow" through the collaborative creating of art

We are recruiting FOURTY-EIGHT students to participate in a study to investigate collaborative creating of artwork to facilitate conflict resolution between groups. This study affords a great opportunity to not only express your perspectives in a safe environment, but also to explore your own personal creativity!

If you're interested, have any questions or would like more information, please contact the researcher and we'll set up a time and date with you:
Researcher:
Supervisor :

Dear Student,

I would like to invite you to take part in a research study entitled:

"Creating" Peace: Peaceful Conflict Resolution by facilitating "Flow" through the collaborative creating of art

The purpose of the study is to investigate collaborative creating of art as a strategy for peaceful conflict resolution between conflicting groups under the conditions of Flow and you have been invited to take part as you are a student studying at University of Salford.

We will be looking at the topic of immigration and observing the impact of immersion in artistic creating on intergroup conflict.
The Participant Information sheet attached details all aspects of the study.
If you have any questions please email the researcher.
Thank you very much,

Appendix D: Revised European Social Survey (Attitudes to Immigration Scale)

Please answer the following questions choosing a number from the scale provided.

How important do you think each of these things should be in deciding whether someone born, brought up and living outside England should be able to come and live here.
   1. Have good educational qualifications

Extremely unimportant   Extremely Important

1   2   3   4   5   6   7   8   9   10

   2. Be able to speak English

Extremely unimportant   Extremely Important

1   2   3   4   5   6   7   8   9   10

   3. Come from a Christian background

Extremely unimportant   Extremely Important

1   2   3   4   5   6   7   8   9   10

   4. Be white

Extremely unimportant   Extremely Important

1   2   3   4   5   6   7   8   9   10

   5. Have work skills that England needs

Extremely unimportant   Extremely Important

1   2   3   4   5   6   7   8   9   10

   6. Be committed to the way of life of England

Extremely unimportant   Extremely Important

1   2   3   4   5   6   7   8   9   10

   7. Would you say that people who come to live here generally take jobs away from workers in England or generally help create new jobs?

Take jobs away   Create new jobs

        1   2   3   4   5   6   7   8   9   10

8. Most people who come to live here work and pay taxes. They also use health and welfare services. On balance, do you think people who come here take out more than they put in or put in more than they take out?

Generally take out more   Generally put in more
1   2   3   4   5   6   7   8   9   10

9. Are England's crime problems made worse or better by people coming to live here from other countries?
Crime problems made worse   Crime problems made better
1   2   3   4   5   6   7   8   9   10

Now thinking of people who have come to live in England from another country who are of a different race or ethnic group from most English people. How much you would mind or not mind if someone like this:

10. Was appointed your boss
Not mind at all   Mind a lot
1   2   3   4   5   6   7   8   9   10

11. Married a close relative of yours
Not mind at all   Mind a lot
1   2   3   4   5   6   7   8   9   10

12. How would you describe the area where you currently live? Circle the number next to the statement to illustrate your answer.

An area where almost nobody is of a different race or ethnic group from most English people 1

Some people are of a different race or ethnic group from most English
 people 2

Many people are of a different race or ethnic group 3

13. Please indicating by circling the number corresponding your answer, how much you agree or disagree that:
'It is better for a country if almost everyone shares the same customs and traditions'

 Agree strongly 1
Agree 2
Neither agree nor disagree 3
Disagree 4

Disagree strongly 5

14. How good or bad is it for a country to have a law against racial or ethnic discrimination in the workplace?

Extremely Bad   Extremely Good

1   2   3   4   5   6   7   8   9   10

15. Some people come to this country and apply for refugee status on the grounds that they fear persecution in their own country. Using a circle to indicate your answer, please say how much you agree or disagree that:

'the government should be generous in judging people's applications for refugee status'.

Agree strongly 1

Agree 2

 Neither agree nor disagree 3

Disagree 4

Disagree strongly 5

16. Out of every 100 people living in England, how many do you think were born outside of England?

WRITE IN: _____out of 100

If you were born in England please answer question 17, if you were not born in England please answer question 18.

17. Compared to people like yourself who were born in England, how do you think the government treats those who have recently come to live here from other countries?

Much better 1

A little better 2

The same 3

A little worse 4

Much worse 5

18. Do you think the religious beliefs and practices in England are generally undermined or enriched by people coming to live here from other countries?

Religious beliefs and practises undermined   Religious beliefs and practices enriched

1   2   3   4   5   6   7   8   9   10

19. Do you have any close friends who are of a different race or ethnic group from most English people?

 IF YES, is that several or a few?

Yes, several 1

Yes, a few 2
No, none at all 3

20. How often do you have any contact, verbal or non-verbal, with people who are of a different race or ethnic group from most English people when you are out and about? This could be on public transport, in the street, in shops or in the neighbourhood.

Never 01 (If you've selected this answer, skip to question 22)
Less than once a month 02 (If you've selected this answer, go to question 21)
Once a month 03 (If you've selected this answer, go to question 21)
Several times a month 04 (If you've selected this answer, go to question 21)
Once a week 05 (If you've selected this answer, go to question 21)
 Several times a week 06 (If you've selected this answer, go to question 21)
Every day 07 (If you've selected this answer, go to question 21)

21. Thinking about this contact, in general how bad or good is it?

Extremely Bad								Extremely Good	
1	2	3	4	5	6	7	8	9	10

22. How close do you feel to England?
Very close 1
Close 2
 Not very close 3
Not close at all 4

23. Do you think some races or ethnic groups are born less intelligent than others?
Yes 1
No 2

24. Do you think some races or ethnic groups are born harder working than others?
Yes 1
 No 2

25. Thinking about the world today, would you say that some cultures are much better than others or that all cultures are equal?
26. Some cultures are much better than others 1
All cultures are equal 2

To what extent do you think England should allow the following groups of people to come and live here?

27. Jewish people from other countries
Allow many to come and live here 1
 Allow some 2

Allow a few 3
 Allow none 4

   28. Muslims from other countries
Allow many to come and live here 1
 Allow some 2
Allow a few 3
 Allow none 4

   29. Gypsies from other countries
Allow many to come and live here 1
 Allow some 2
Allow a few 3
 Allow none 4
    30. To what extent you think England should allow professionals from Poland to come
      to live in here?
Allow many to come and live here 1
 Allow some 2
Allow a few 3
 Allow none 4
    31. To what extent you think England should allow professionals from India to come
      to live in here?
Allow many to come and live here 1
 Allow some 2
Allow a few 3
 Allow none 4
    32. To what extent you think England should allow unskilled labourers from Poland to
      come to live in here?
Allow many to come and live here 1
 Allow some 2
Allow a few 3
 Allow none 4
    33. To what extent you think England should allow unskilled labourers from India to
      come to live in here?
Allow many to come and live here 1
 Allow some 2
Allow a few 3
 Allow none 4

Flow State Scale

Please answer the following questions in relation to your experience in the event you have just completed. These questions relate to the thoughts and feelings you may have experienced during the event. There are no right or wrong answers. Think about how you felt during the event and answer the questions using the rating scale below. Circle the number that best matches your experience from the options to the right of each question.

Rating Scale:

Strongly disagree 1	Disagree 2	Neither agree nor disagree 3	Agree 4		Strongly agree 5

	Strongly disagree				Strongly agree
1. I was challenged, but I believed my skills would allow me to meet the challenge.	1	2	3	4	5
2. I made the correct movements without thinking about trying to do so.	1	2	3	4	5
3. I knew clearly what I wanted to do.	1	2	3	4	5
4. It was really clear to me that I was doing well.	1	2	3	4	5
5. My attention was focused entirely on what I was doing.	1	2	3	4	5
6. I felt in total control of what I was doing.	1	2	3	4	5
7. I was not concerned with what others may have been thinking of me.	1	2	3	4	5
8. Time seemed to alter (either slowed down or speeded up).	1	2	3	4	5
9. I really enjoyed the experience.	1	2	3	4	5
10. My abilities matched the high challenge of the situation.	1	2	3	4	5
11. Things just seemed to be happening automatically.	1	2	3	4	5
12. I had a strong sense of what I wanted to do.	1	2	3	4	5
13. I was aware of how well I was performing.	1	2	3	4	5
14. It was no effort to keep my mind on what was happening.	1	2	3	4	5
15. I felt like I could control what I was doing.	1	2	3	4	5
16. I was not worried about my performance during the event.	1	2	3	4	5

17. The way time passed seemed to be different from normal.	1	2	3	4	5
18. I loved the feeling of that performance and want to capture it again.	1	2	3	4	5
19. I felt I was competent enough to meet the high demands of the situation.	1	2	3	4	5
20. I performed automatically.	1	2	3	4	5
21. I knew what I wanted to achieve.	1	2	3	4	5
22. I had a good idea while I was performing about how well I was doing.	1	2	3	4	5
23. I had total concentration.	1	2	3	4	5
24. I had a feeling of total control.	1	2	3	4	5
25. I was not concerned with how I was presenting myself.	1	2	3	4	5
26. It felt like time stopped while I was performing.	1	2	3	4	5
27. The experience left me feeling great.	1	2	3	4	5
28. The challenge and my skills were at an equally high level.	1	2	3	4	5
29. I did things spontaneously and automatically without having to think.	1	2	3	4	5
30. My goals were clearly defined.	1	2	3	4	5
31. I could tell by the way I was performing how well I was doing.	1	2	3	4	5
32. I was completely focused on the task at hand.	1	2	3	4	5
33. I felt in total control of my body.	1	2	3	4	5
34. I was not worried about what others may have been thinking of me.	1	2	3	4	5
35. At times, it almost seemed like things were happening in slow motion.	1	2	3	4	5
36. I found the experience extremely rewarding.	1	2	3	4	5

236

Title of Project: "Creating" Peace: Peaceful Conflict Resolution by facilitating "Flow" through the collaborative creating of art

RGEC Ref No:

Name of Researcher:
Name of Supervisor:

(Delete as appropriate)

> I confirm that I have read and understood Participant Information Sheet Version 2.0 24.02.17 and what my contribution will be.

Yes	No

> I have been given the opportunity to ask questions (face to face, via telephone and e-mail)

Yes	No

> I agree to take part in a group and for this to be audio and visually recorded.

Yes	No

> I agree to keep whatever is discussed throughout this study and the identities of all participants confidential

Yes	No

> I understand that my participation is voluntary and that I can withdraw from the research at any time without giving any reason.

Yes	No

> I agree to take part in the above study

Yes	No

Should you choose to withdraw, your information will remain part of the research data.

Signature :   …………………………….

 Date: ………………………….

Name of researcher taking consent:
Name of Supervisor:

Researchers' Email address:
Supervisors' Email address:

Title of Project: "Creating" Peace: Peaceful Conflict Resolution by facilitating "Flow" through the collaborative creating of art
RGEC Ref No:
Name of Researcher:
Name of Supervisor:

(Delete as appropriate)

➢ I confirm that I have read and understood the Participant Information Sheet Version 2.0 24.02.17 for the above study and what my contribution will be.

Yes	**No**

➢ I have been given the opportunity to ask questions (face to face, via telephone and e-mail)

Yes	**No**

➢ I agree to take part in a one on one interview and for this to be audio recorded

Yes	**No**

➢ I understand that my participation is voluntary and that I can withdraw from the research up until a month after the interview **without giving any reason.**

Yes	**No**

➢ **I agree to take part in the semi-structured interviews**

Yes	**No**

Should you choose to withdraw, your information will remain part of the research data.

Signature :   …………………………….

Date: …………………………….

Name of researcher taking consent:

239

Name of Supervisor:

Researchers' Email address:
Supervisors' Email address:

Study Title

"Creating" Peace: Peaceful Conflict Resolution by facilitating "Flow" through the collaborative creating of art

Invitation paragraph

I would like to invite you to take part in a research study. Before you decide you need to understand why the research is being done and what it would involve for you. Please take time to read the following information carefully. Ask questions if anything you read is not clear or you would like more information. Take time to decide whether or not to take part. You are given up to 24 hours to decide your involvement in this research project.

What is the purpose of the study?

The purpose of the study is to investigate collaborative creating of art as a strategy for peaceful conflict resolution between conflicting groups under the conditions of Flow.

Why have I been invited?

You have been invited to take part as you are a student studying at University of Salford.

Do I have to take part?

Taking part in the research is entirely voluntary. It is up to you to decide. Declining to participate will have no consequence for you whatsoever. If you do decide to take part you will be asked to complete a consent form to show you agree to take part but you are free to withdraw at any time, without giving a reason. If you do decide to withdraw, all your data will be destroyed and there will be no need to take any further part in the study.

What will happen to me if I take part?

You will first be sent an Attitudes on Immigration questionnaire to complete. Upon completion you will be placed in a group under the category of either Pro or Anti - Immigration. On an agreed upon date you will meet with other students in your group and write a personal account of your position and the reason for your position. Following this, you will be administered an Interpersonal Peacefulness Scale to complete. You will then be randomly placed into one of four groups where you be asked to do one of the following:

1. Create in a collaborative creating exercise
2. Complete a survey
3. Read an account from the opposing group and create collaboratively from their perspective
4. Read an account from the opposing croup

The above exercise will be audio and visual recorded. At the end of this exercise you will be administered an Attitudes on Immigration questionnaire, an Interpersonal Peacefulness Scale and a Flow State Scale. The entire exercise is expected to last approximately 3 hours. Eight participants will then randomly be chosen for a semi-structured, one on one interview with the researcher, regarding the study experience. The semi-structured interview will be audio recorded for transcription and analysis and is expected to last approximately 1 hour.

What are the possible disadvantages and risks of taking part?

As immigration may be considered a sensitive topic some participants may not be comfortable sharing those views. Participants are reminded that all conversation is kept

confidential and all views are welcome to be expressed. If at all the exercise makes you uncomfortable, you are free to withdraw at any time. If you would like further support, please see information for the school's Wellbeing Service below.

What are the possible benefits of taking part?

We cannot promise the study will help you personally but the information we get from the study will help to create an understanding of the experience of collaborative creating between conflicting groups. The results from the study will be carefully analysed and the data may also be published for the benefit of the academic community.

Will my taking part in the study be kept confidential?

Your data will be confidential and any recording that identifies you will be stored carefully with only the researcher having access. You will also be given a unique participant ID should you wish to withdraw any of your data after the study has been completed. Data will be stored for up to 5 years, after which it will be destroyed.

What will happen if there is a problem?

If you have any queries or questions please contact:

Principal investigator: XXXXX

School of Health Sciences

Address: XXXXX

Tel: XXXXX

Email: XXXXX

If you remain dissatisfied you can contact:

Anish Kurien

Research Centres Manager

University of Salford

G.08, Joule House, Acton Square, Salford, M5 4WT

t: +44 (0) 161 295 5276

e: a.kurien@salford.ac.uk

Support

If after participating you feel upset, disadvantaged or uncomfortable, support and advice are available from the University's Wellbeing Service and Counselling Service. To book a session call 0161 295 0023 or book online using Salford Advantage.

If after participating in the study you have any concerns regarding your own academic work, support and advice are available from the University's Student Life (http://www.advice.salford.ac.uk Email: advice@salford.ac.uk Tel: 0161 295 0023). Alternatively you may wish to discuss any concerns with your programme leader or personal tutor. I can also be contacted using the contact details provided below.

Contact details: For further information or questions about the study please email the researcher.

Study Title

"Creating" Peace: Peaceful Conflict Resolution by facilitating "Flow" through the collaborative creating of art

Invitation paragraph

I would like to invite you to take part in a research study. Before you decide you need to understand why the research is being done and what it would involve for you. Please take time to read the following information carefully. Ask questions if anything you read is not clear or you would like more information. Take time to decide whether or not to take part. You are given up to 24 hours to decide your involvement in this research project.

What is the purpose of the study?

The purpose of the study is to investigate collaborative creating of art as a strategy for peaceful conflict resolution between conflicting groups under the conditions of Flow.

Why have I been invited?

You have been invited to take part as you are a student studying at University of Salford.

Do I have to take part?

Taking part in the research is entirely voluntary. It is up to you to decide. Declining to participate will have no consequence for you whatsoever. If you do decide to take part you will be asked to complete a consent form to show you agree to take part but you are free to withdraw at any time, without giving a reason. If you do decide to withdraw, all your data will be destroyed and there will be no need to take any further part in the study.

What will happen to me if I take part?

You will engage in a one on one semi-structured interview with the researcher, with questions relating to the study experience. The semi-structured interview will be audio recorded for transcription and analysis and is expected to last approximately 1 hour.

What are the possible disadvantages and risks of taking part?

It may occur that participants are not comfortable answering some questions. Participants are reminded that all conversation is kept confidential and all views are welcome to be expressed. If at all the exercise makes you uncomfortable, you are free to withdraw at any time. If you would like further support, please see information for the school's Wellbeing Service below.

What are the possible benefits of taking part?

We cannot promise the study will help you personally but the information we get from the study will help to create an understanding of the experience of collaborative creating between conflicting groups. The results from the study will be carefully analysed and the data may also be published for the benefit of the academic community.

Will my taking part in the study be kept confidential?

Your data will be confidential and any recording that identifies you will be stored carefully with only the researcher having access. You will also be given a unique participant ID should you wish to withdraw any of your data after the study has been completed. Data will be stored for up to 5 years, after which it will be destroyed.

What will happen if there is a problem?

If you have any queries or questions please contact:

Principal investigator: XXXXX

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Address: XXXXX

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If after participating in the study you have any concerns regarding your own academic work, support and advice are available from the University's Student Life (http://www.advice.salford.ac.uk Email: advice@salford.ac.uk Tel: 0161 295 0023). Alternatively you may wish to discuss any concerns with your programme leader or personal tutor. I can also be contacted using the contact details provided below.

Contact details: For further information or questions about the study please email the researcher.

Condition	Shapiro Wilks
FLOW SUM	
- Collaborative Creating Only	W(6) = 0.81, p = 0.07
- Collaborative Creating + Perspective Giving and	W(8) = 0.83. p = 0.06
Taking	W(10) = 0.89, p = 0.18
- Collaborative Activity Only	W(6) = 0.94, p = 0.64
- Collaborative Activity + Perspective Giving and	
Taking	
ACT – Action Awareness Merging	
- Collaborative Creating Only	W(6) = 0.91, p = 0.42
- Collaborative Creating + Perspective Giving and	W(8) = 0.96, p = 0.84
Taking	W(10) = 0.91, p = 0.25
- Collaborative Activity Only	W(6) = 0.92, p = 0.51
- Collaborative Activity + Perspective Giving and	
Taking	
CHAL SUM – Challenge Skill Balance	
- Collaborative Creating Only	W(6) = 0.96, p = 0.80
- Collaborative Creating + Perspective Giving and	W(8) = 0.91, p = 0.32
Taking	W(10) = 0.93, p = 0.48
- Collaborative Activity Only	W(6) = 0.89, p = 0.33
- Collaborative Activity + Perspective Giving and	
Taking	
CONC SUM – Concentration on Task	

- Collaborative Creating Only	W(6) = 0.95, p = 0.71
- Collaborative Creating + Perspective Giving and Taking	W(8) = 0.92, p = 0.45
	W(10) = 0.81, p = 0.02
- Collaborative Activity Only	W(6) = 0.89, p = 0.31
- Collaborative Activity + Perspective Giving and Taking	

CONT SUM – Paradox of Control

- Collaborative Creating Only	W(6) = 0.93, p = 0.61
- Collaborative Creating + Perspective Giving and	W(8) = 0.94, p = 0.63
Taking	W(10) = 0.91, p = 0.27
- Collaborative Activity Only	W(6) = 0.87, p = 0.23
- Collaborative Activity + Perspective Giving and Taking	

FDBK SUM – Unambiguous Feedback

- Collaborative Creating Only	W(6) = 0.90, p = 0.35
- Collaborative Creating + Perspective Giving and	W(8) = 0.91, p = 0.40
Taking	W(10) = 0.91, p = 0.27
- Collaborative Activity Only	W(6) = 0.94, p = 0.67
- Collaborative Activity + Perspective Giving and Taking	

GOAL SUM – Clear Goals

- Collaborative Creating Only	W(6) = 0.97, p = 0.91

- Collaborative Creating + Perspective Giving and Taking	$W(8) = 0.87, p = 0.15$ $W(10) = 0.94, p = 0.51$
- Collaborative Activity Only	$W(6) = 0.92, p = 0.47$
- Collaborative Activity + Perspective Giving and Taking	

LOSS SUM – Clear Goals

- Collaborative Creating Only	**$W(6) = 0.74, p = 0.02$**
- Collaborative Creating + Perspective Giving and Taking	$W(8) = 0.91, p = 0.34$ $W(10) = 0.64, p = 0.00$
- Collaborative Activity Only	$W(6) = 0.92, p = 0.51$
- Collaborative Activity + Perspective Giving and Taking	

TRAN SUM – Transformation of Time

- Collaborative Creating Only	$W(6) = 0.93, p = 0.57$
- Collaborative Creating + Perspective Giving and Taking	**$W(8) = 0.74, p = 0.01$** $W(10) = 0.92, p = 0.37$
- Collaborative Activity Only	$W(6) = 0.86, p = 0.19$
- Collaborative Activity + Perspective Giving and Taking	

Appendix K: Descriptive Statistics for the four types of activity

Condition	Median	Interquartile Range	*n*
FLOW SUM			
- **Collaborative Creating Only**	129.00	27.00	6
- **Collaborative Creating + Perspective Giving and**	141.50	40.75	8
Taking	140.50	40.00	10
- **Collaborative Activity Only**	126.00	44.50	6
- **Collaborative Activity + Perspective Giving and Taking**			
ACT SUM – Action Awareness Merging			
- **Collaborative Creating Only**	15.00	4.50	6
- **Collaborative Creating + Perspective Giving and**	14.00	7.75	8
Taking	16.00	3.75	10
- **Collaborative Activity Only**	13.00	6.50	6
- **Collaborative Activity + Perspective Giving and Taking**			
CHAL SUM – Challenge Skill Balance			
- **Collaborative Creating Only**	13.50	4.50	6
- **Collaborative Creating + Perspective Giving and**	16.50	3.50	8
Taking	16.00	3.75	10
- **Collaborative Activity Only**	15.50	5.75	6
- **Collabrative Activity + Perspective Giving and Taking**			
CONC SUM – Concentration on Task			
- **Collaborative Creating Only**	15.50	6.50	6

- Collaborative Creating + Perspective Giving and	18.00	3.25	8
Taking	19.00	3.50	10
- Collaborative Activity Only	15.50	5.50	6
- Collaborative Activity + Perspective Giving and Taking			
CONT SUM – Paradox of Control			
- Collaborative Creating Only	14.00	5.50	6
- Collaborative Creating + Perspective Giving and	16.50	4.25	8
Taking	17.00	5.25	10
- Collaborative Activity Only	16.00	5.50	6
- Collaborative Activity + Perspective Giving and Taking			
FDBK SUM – Unambiguous Feedback			
- Collaborative Creating Only	12.00	3.75	6
- Collaborative Creating + Perspective Giving and	15.00	4.75	8
Taking	14.50	4.00	10
- Collaborative Activity Only	12.50	6.50	6
- Collaborative Activity + Perspective Giving and Taking			
GOAL SUM – Clear Goals			
- Collaborative Creating Only	12.50	5.00	6
- Collaborative Creating + Perspective Giving and	13.50	5.50	8
Taking	15.50	3.75	10
- Collaborative Activity Only	16.00	3.00	6

- **Collaborative Activity + Perspective Giving and Taking**

LOSS SUM – Clear Goals

- **Collaborative Creating Only**	16.00	8.25	6
- **Collaborative Creating + Perspective Giving and**	15.00	9.00	8
Taking	19.00	3.75	10
- **Collaborative Activity Only**	12.50	8.25	6
- **Collaborative Activity + Perspective Giving and Taking**			

TRAN SUM – Transformation of Time

- **Collaborative Creating Only**	13.50	5.50	6
- **Collaborative Creating + Perspective Giving and**	13.00	3.25	8
Taking	10.00	10.00	10
- **Collaborative Activity Only**	12.50	4.50	6
- **Collaborative Activity + Perspective Giving and Taking**			

ENJY SUM – Autotelic Experience

- **Collaborative Creating Only**	15.00	3.00	6
- **Collaborative Creating + Perspective Giving and**	17.50	4.25	8
Taking	15.50	6.00	10
- **Collaborative Activity Only**	13.50	3.50	6
- **Collaborative Activity + Perspective Giving and Taking**			

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
FLOWSUM	30	76.9%	9	23.1%	39	100.0%

Descriptives

			Statistic	Std. Error
FLOWSUM	Mean		133.0000	3.81768
	95% Confidence Interval for Mean	Lower Bound	125.1920	
		Upper Bound	140.8080	
	5% Trimmed Mean		133.2037	
	Median		132.5000	
	Variance		437.241	
	Std. Deviation		20.91032	
	Minimum		85.00	
	Maximum		176.00	
	Range		91.00	
	Interquartile Range		33.75	
	Skewness		-.122	.427
	Kurtosis		-.380	.833

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
FLOWSUM	.097	30	.200[*]	.982	30	.886

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

FLOWSUM

Histogram

Mean = 133.00
Std. Dev. = 20.91
N = 30
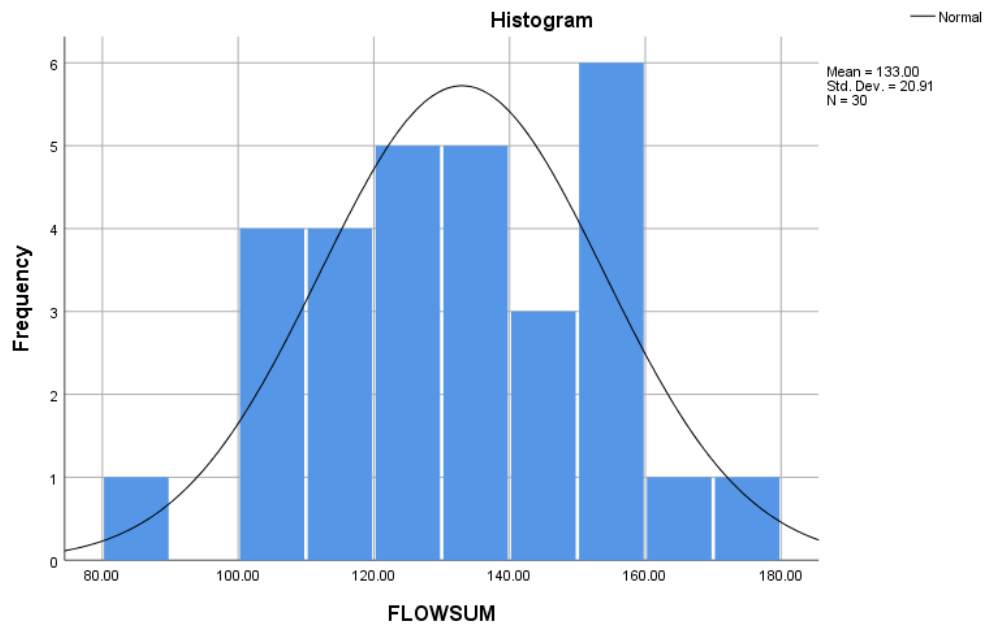
Case Processing Summary

		Cases					
		Valid		Missing		Total	
	Condition	N	Percent	N	Percent	N	
FLOWSUM	Collaborative Creating Only	6	100.0%	0	0.0%	6	
	Collaborative Creating + Perspective Giving and Taking	8	100.0%	0	0.0%	8	
	Collaborative Activity Only	10	100.0%	0	0.0%	10	
	Collaborative Activity + Perspective Giving and Taking	6	100.0%	0	0.0%	6	

Case Processing Summary

		Cases
		Total
	Condition	Percent
FLOWSUM	Collaborative Creating Only	100.0%
	Collaborative Creating + Perspective Giving and Taking	100.0%
	Collaborative Activity Only	100.0%
	Collaborative Activity + Perspective Giving and Taking	100.0%

Descriptives

253

	Condition			Statistic	Std. Error
FLOWSUM	Collaborative Creating Only	Mean		122.3333	8.06088
		95% Confidence Interval for Mean	Lower Bound	101.6122	
			Upper Bound	143.0545	
		5% Trimmed Mean		123.4815	
		Median		129.0000	
		Variance		389.867	
		Std. Deviation		19.74504	
		Minimum		85.00	
		Maximum		139.00	
		Range		54.00	
		Interquartile Range		27.00	
		Skewness		-1.751	.845
		Kurtosis		3.192	1.741
	Collaborative Creating + Perspective Giving and Taking	Mean		134.8750	7.04434
		95% Confidence Interval for Mean	Lower Bound	118.2178	
			Upper Bound	151.5322	
		5% Trimmed Mean		135.4722	
		Median		141.5000	
		Variance		396.982	
		Std. Deviation		19.92441	
		Minimum		106.00	
		Maximum		153.00	
		Range		47.00	
		Interquartile Range		40.75	
		Skewness		-.676	.752
		Kurtosis		-1.379	1.481
	Collaborative Activity Only	Mean		140.5000	6.79093
		95% Confidence Interval for Mean	Lower Bound	125.1379	
			Upper Bound	155.8621	
		5% Trimmed Mean		139.8333	
		Median		140.5000	
		Variance		461.167	
		Std. Deviation		21.47479	
		Minimum		117.00	
		Maximum		176.00	
		Range		59.00	
		Interquartile Range		40.00	
		Skewness		.264	.687
		Kurtosis		-1.410	1.334

Collaborative Activity + Perspective Giving and Taking	Mean		128.6667	8.97280
	95% Confidence Interval for Mean	Lower Bound	105.6014	
		Upper Bound	151.7320	
	5% Trimmed Mean		128.3519	
	Median		126.0000	
	Variance		483.067	
	Std. Deviation		21.97878	
	Minimum		104.00	
	Maximum		159.00	
	Range		55.00	
	Interquartile Range		44.50	
	Skewness		.344	.845
	Kurtosis		-1.534	1.741

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk	
	Condition	Statistic	df	Sig.	Statistic	Df
FLOWSUM	Collaborative Creating Only	.299	6	.101	.812	6
	Collaborative Creating + Perspective Giving and Taking	.245	8	.173	.833	8
	Collaborative Activity Only	.230	10	.142	.892	10
	Collaborative Activity + Perspective Giving and Taking	.160	6	.200[*]	.937	6

Tests of Normality

		Shapiro-Wilk[a]
	Condition	Sig.
FLOWSUM	Collaborative Creating Only	.074
	Collaborative Creating + Perspective Giving and Taking	.063
	Collaborative Activity Only	.179
	Collaborative Activity + Perspective Giving and Taking	.637

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

FLOWSUM

Histograms

Histogram

for Condition= Collaborative Activity Only

Mean = 140.50
Std. Dev. = 21.475
N = 10

Histogram

for Condition= Collaborative Activity + Perspective Giving and Taking

Mean = 128.67
Std. Dev. = 21.979
N = 6
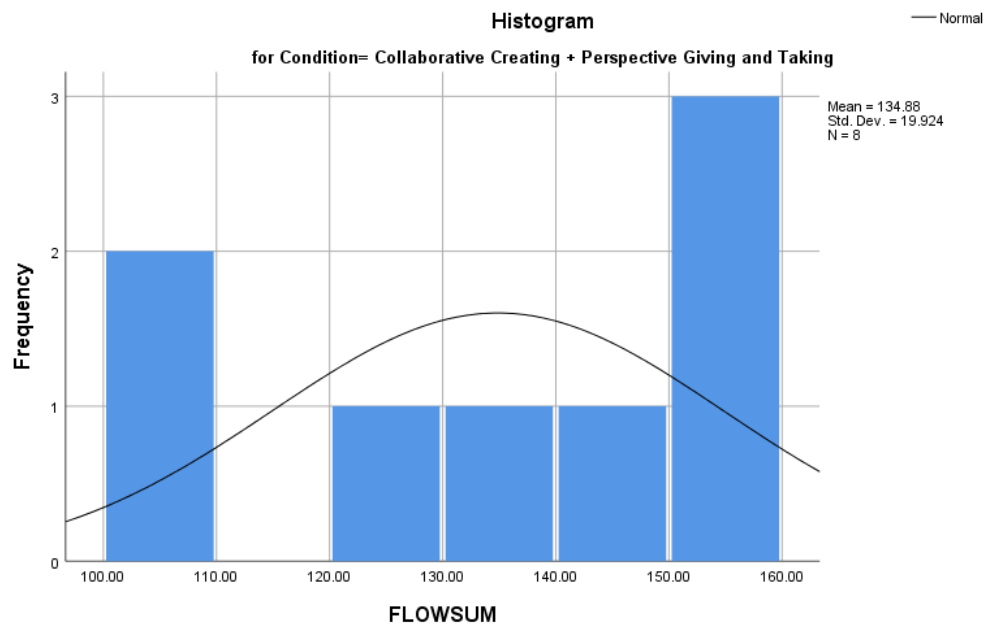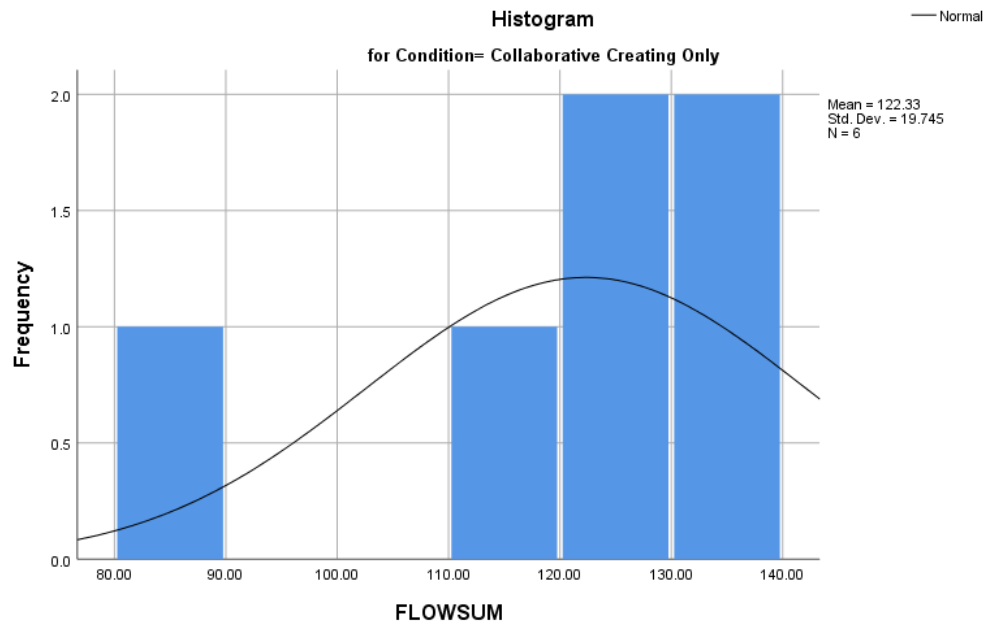
Case Processing Summary

		Cases				
		Valid		Missing		Total
	Condition	N	Percent	N	Percent	N
ACTSUM	Collaborative Creating Only	6	100.0%	0	0.0%	6
	Collaborative Creating + Perspective Giving and Taking	8	100.0%	0	0.0%	8
	Collaborative Activity Only	10	100.0%	0	0.0%	10

		6	100.0%	0	0.0%	6
Collaborative Activity + Perspective Giving and Taking						

Case Processing Summary

		Cases Total Percent
	Condition	
ACTSUM	Collaborative Creating Only	100.0%
	Collaborative Creating + Perspective Giving and Taking	100.0%
	Collaborative Activity Only	100.0%
	Collaborative Activity + Perspective Giving and Taking	100.0%

Descriptives

	Condition			Statistic	Std. Error
ACTSUM	Collaborative Creating Only	Mean		14.3333	.95452
		95% Confidence Interval for Mean	Lower Bound	11.8797	
			Upper Bound	16.7870	
		5% Trimmed Mean		14.3704	
		Median		15.0000	
		Variance		5.467	
		Std. Deviation		2.33809	
		Minimum		11.00	
		Maximum		17.00	
		Range		6.00	
		Interquartile Range		4.50	
		Skewness		-.600	.845
		Kurtosis		-1.289	1.741
	Collaborative Creating + Perspective Giving and Taking	Mean		14.3750	1.48730
		95% Confidence Interval for Mean	Lower Bound	10.8581	
			Upper Bound	17.8919	
		5% Trimmed Mean		14.4167	
		Median		14.0000	
		Variance		17.696	
		Std. Deviation		4.20671	
		Minimum		8.00	
		Maximum		20.00	
		Range		12.00	
		Interquartile Range		7.75	
		Skewness		-.135	.752

		Kurtosis		-1.034	1.481
	Collaborative Activity Only	Mean		15.2000	1.14310
		95% Confidence Interval for Mean	Lower Bound	12.6141	
			Upper Bound	17.7859	
		5% Trimmed Mean		15.3889	
		Median		16.0000	
		Variance		13.067	
		Std. Deviation		3.61478	
		Minimum		7.00	
		Maximum		20.00	
		Range		13.00	
		Interquartile Range		3.75	
		Skewness		-1.296	.687
		Kurtosis		2.362	1.334
	Collaborative Activity + Perspective Giving and Taking	Mean		13.6667	1.33333
		95% Confidence Interval for Mean	Lower Bound	10.2392	
			Upper Bound	17.0941	
		5% Trimmed Mean		13.6296	
		Median		13.0000	
		Variance		10.667	
		Std. Deviation		3.26599	
		Minimum		10.00	
		Maximum		18.00	
		Range		8.00	
		Interquartile Range		6.50	
		Skewness		.392	.845
		Kurtosis		-1.850	1.741

Tests of Normality

	Condition	Kolmogorov-Smirnov[a]			Shapiro-Wilk	
		Statistic	df	Sig.	Statistic	df
ACTSUM	Collaborative Creating Only	.279	6	.159	.908	6
	Collaborative Creating + Perspective Giving and Taking	.128	8	.200*	.963	8
	Collaborative Activity Only	.188	10	.200*	.906	10
	Collaborative Activity + Perspective Giving and Taking	.195	6	.200*	.920	6

Tests of Normality

	Condition	Shapiro-Wilk[a] Sig.
ACTSUM	Collaborative Creating Only	.421
	Collaborative Creating + Perspective Giving and Taking	.836
	Collaborative Activity Only	.253
	Collaborative Activity + Perspective Giving and Taking	.505

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

ACTSUM

Histograms

Histogram for Condition= Collaborative Creating Only

Mean = 14.33
Std. Dev. = 2.338
N = 6

Histogram

for Condition= Collaborative Creating + Perspective Giving and Taking

Mean = 14.38
Std. Dev. = 4.207
N = 8

Histogram

for Condition= Collaborative Activity Only

Mean = 15.20
Std. Dev. = 3.615
N = 10

Histogram

for Condition= Collaborative Activity + Perspective Giving and Taking

Mean = 13.67
Std. Dev. = 3.266
N = 6
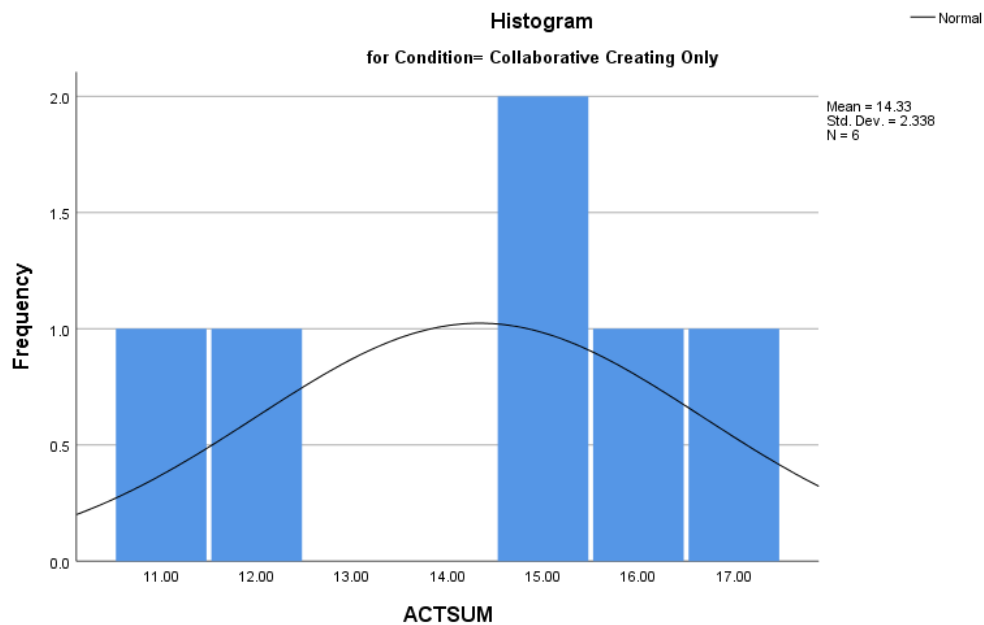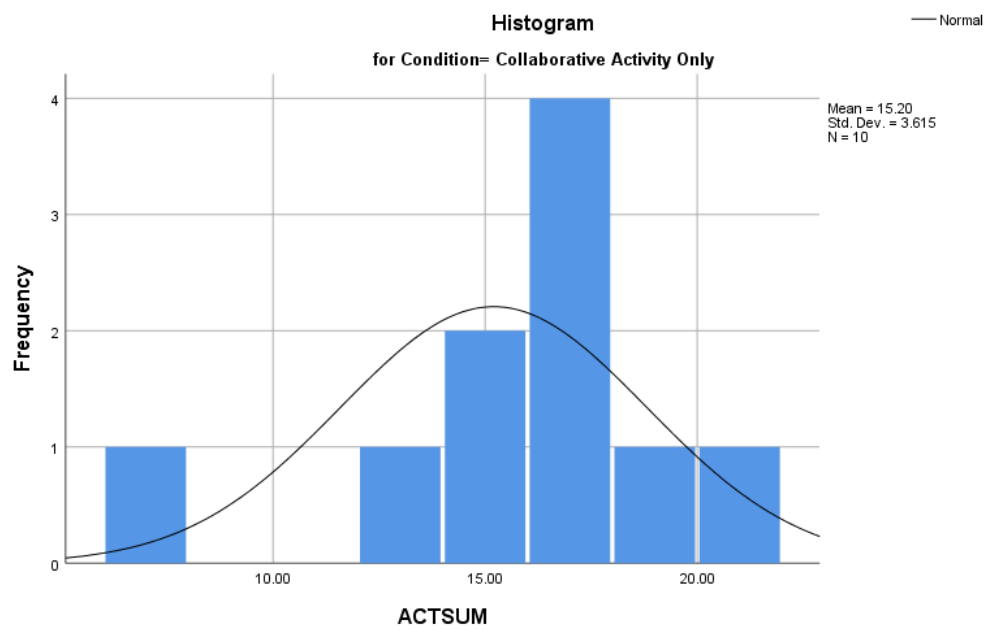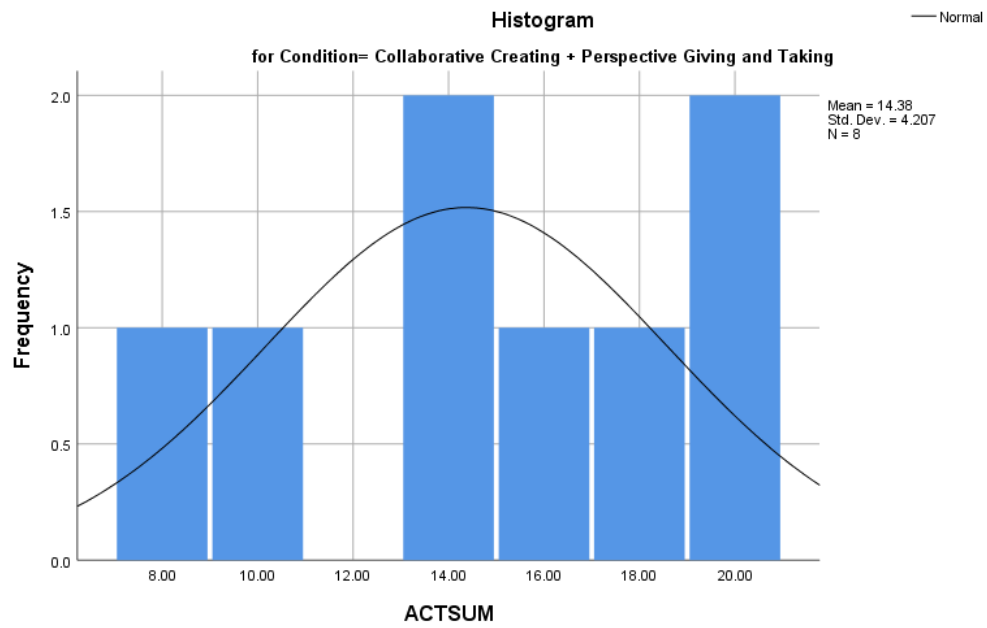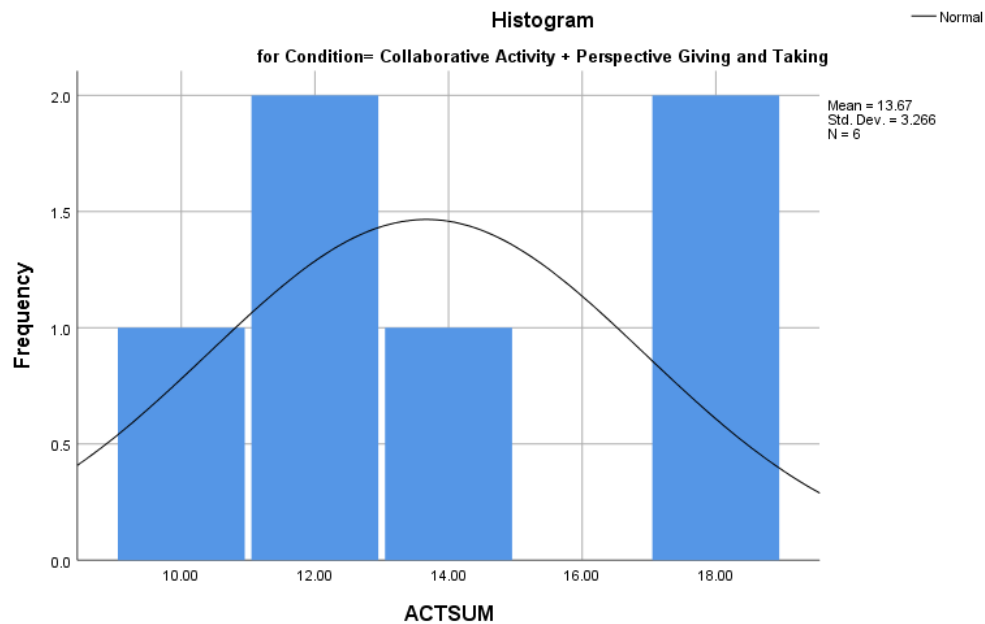
Case Processing Summary

	Condition	Cases					
		Valid		Missing		Total	
		N	Percent	N	Percent	N	
CHALSUM	Collaborative Creating Only	6	100.0%	0	0.0%	6	
	Collaborative Creating + Perspective Giving and Taking	8	100.0%	0	0.0%	8	
	Collaborative Activity Only	10	100.0%	0	0.0%	10	
	Collaborative Activity + Perspective Giving and Taking	6	100.0%	0	0.0%	6	

Case Processing Summary

	Condition	Cases
		Total
		Percent
CHALSUM	Collaborative Creating Only	100.0%
	Collaborative Creating + Perspective Giving and Taking	100.0%
	Collaborative Activity Only	100.0%
	Collaborative Activity + Perspective Giving and Taking	100.0%

Descriptives

	Condition			Statistic	Std. Error
CHALSUM	Collaborative Creating Only	Mean		13.8333	.94575
		95% Confidence Interval for Mean	Lower Bound	11.4022	
			Upper Bound	16.2645	
		5% Trimmed Mean		13.8148	
		Median		13.5000	
		Variance		5.367	
		Std. Deviation		2.31661	
		Minimum		11.00	
		Maximum		17.00	
		Range		6.00	
		Interquartile Range		4.50	
		Skewness		.300	.845
		Kurtosis		-1.418	1.741
	Collaborative Creating + Perspective Giving and Taking	Mean		15.5000	1.00000
		95% Confidence Interval for Mean	Lower Bound	13.1354	
			Upper Bound	17.8646	
		5% Trimmed Mean		15.6111	
		Median		16.5000	
		Variance		8.000	
		Std. Deviation		2.82843	
		Minimum		10.00	
		Maximum		19.00	
		Range		9.00	
		Interquartile Range		3.50	
		Skewness		-1.086	.752
		Kurtosis		1.097	1.481
	Collaborative Activity Only	Mean		15.9000	.86217
		95% Confidence Interval for Mean	Lower Bound	13.9496	
			Upper Bound	17.8504	
		5% Trimmed Mean		15.9444	
		Median		16.0000	
		Variance		7.433	
		Std. Deviation		2.72641	
		Minimum		11.00	
		Maximum		20.00	
		Range		9.00	
		Interquartile Range		3.75	
		Skewness		-.609	.687
		Kurtosis		.130	1.334

Collaborative Activity + Perspective Giving and Taking	Mean		16.3333	1.28236
	95% Confidence Interval for Mean	Lower Bound	13.0369	
		Upper Bound	19.6297	
	5% Trimmed Mean		16.3704	
	Median		15.5000	
	Variance		9.867	
	Std. Deviation		3.14113	
	Minimum		12.00	
	Maximum		20.00	
	Range		8.00	
	Interquartile Range		5.75	
	Skewness		.120	.845
	Kurtosis		-1.070	1.741

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk	
	Condition	Statistic	df	Sig.	Statistic	df
CHALSUM	Collaborative Creating Only	.159	6	.200[*]	.958	6
	Collaborative Creating + Perspective Giving and Taking	.202	8	.200[*]	.905	8
	Collaborative Activity Only	.215	10	.200[*]	.934	10
	Collaborative Activity + Perspective Giving and Taking	.212	6	.200[*]	.893	6

Tests of Normality

		Shapiro-Wilk[a]
	Condition	Sig.
CHALSUM	Collaborative Creating Only	.801
	Collaborative Creating + Perspective Giving and Taking	.318
	Collaborative Activity Only	.484
	Collaborative Activity + Perspective Giving and Taking	.332

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

CHALSUM

Histograms

Histogram
for Condition= Collaborative Creating Only

Mean = 13.83
Std. Dev. = 2.317
N = 6

CHALSUM

Histogram
for Condition= Collaborative Creating + Perspective Giving and Taking

Mean = 15.50
Std. Dev. = 2.828
N = 8

CHALSUM

Histogram

for Condition= Collaborative Activity Only

Mean = 15.90
Std. Dev. = 2.726
N = 10

CHALSUM

Histogram

for Condition= Collaborative Activity + Perspective Giving and Taking

Mean = 14.50
Std. Dev. = 3.937
N = 6

CHALSUM
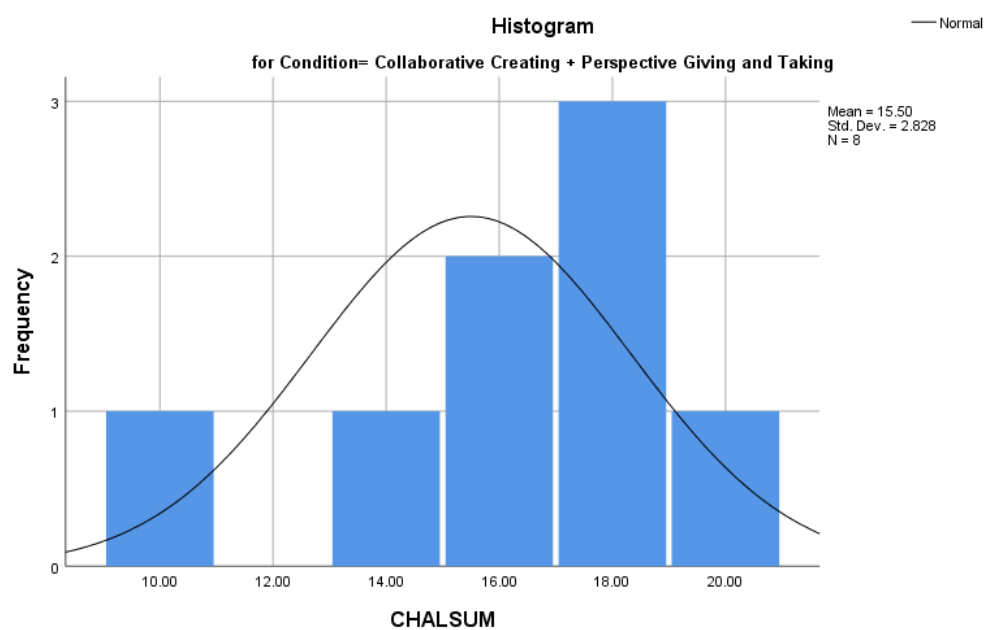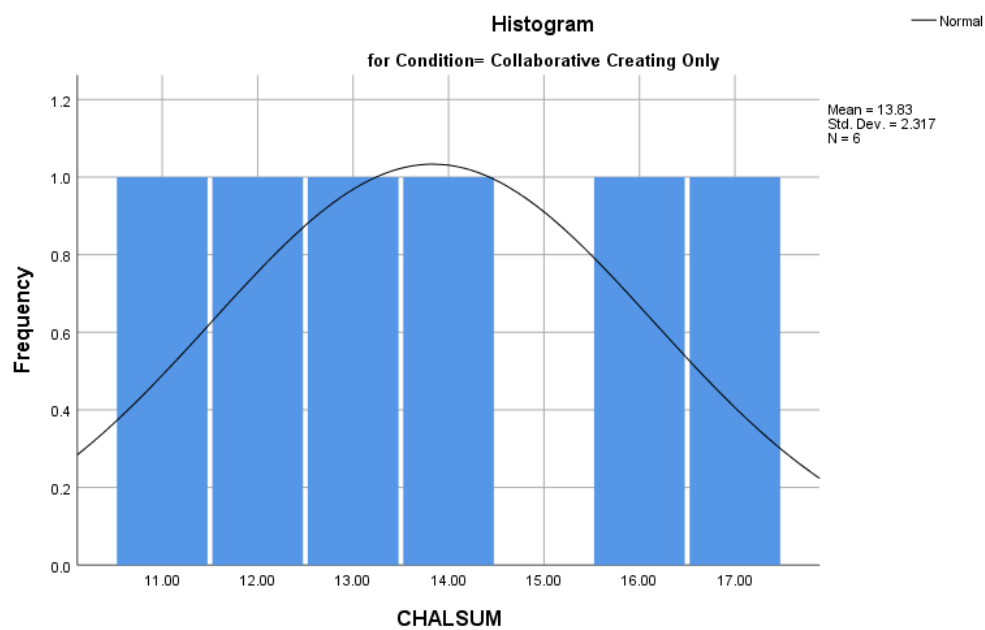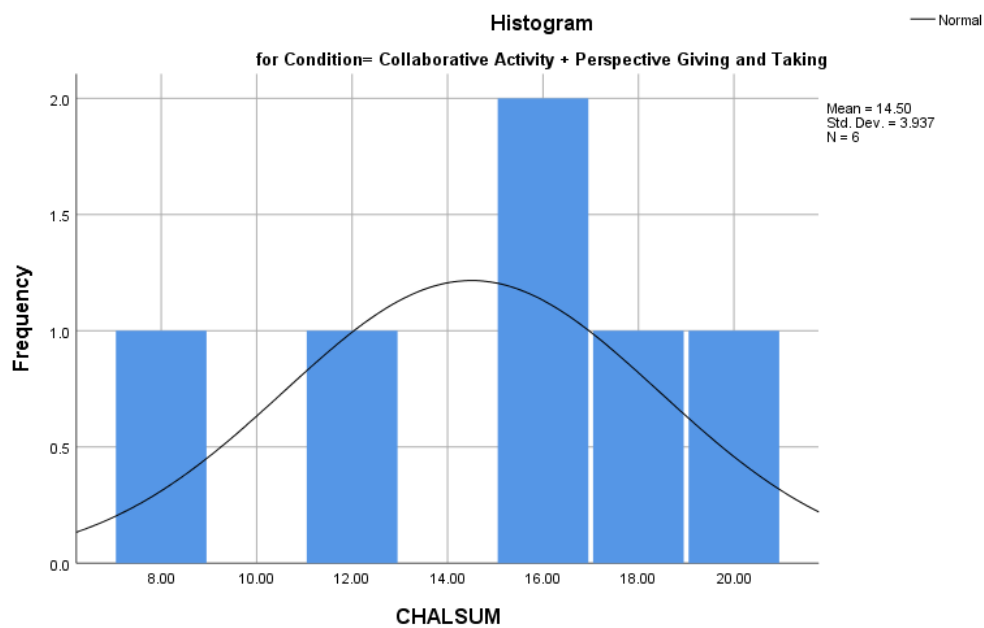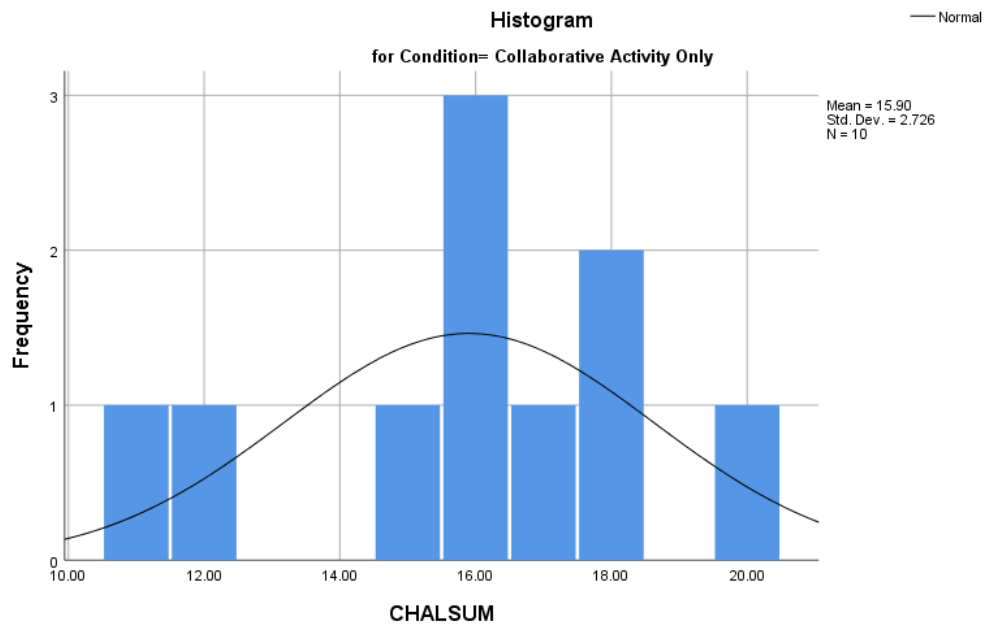
Case Processing Summary

		Cases				
		Valid		Missing		Total
	Condition	N	Percent	N	Percent	N
CONCSUM	Collaborative Creating Only	6	100.0%	0	0.0%	6
	Collaborative Creating + Perspective Giving and Taking	8	100.0%	0	0.0%	8
	Collaborative Activity Only	10	100.0%	0	0.0%	10

266

		6	100.0%	0	0.0%	6
Collaborative Activity + Perspective Giving and Taking						

Case Processing Summary

		Cases Total Percent
	Condition	
CONCSUM	Collaborative Creating Only	100.0%
	Collaborative Creating + Perspective Giving and Taking	100.0%
	Collaborative Activity Only	100.0%
	Collaborative Activity + Perspective Giving and Taking	100.0%

Descriptives

	Condition			Statistic	Std. Error
CONCSUM	Collaborative Creating Only	Mean		14.5000	1.60728
		95% Confidence Interval for Mean	Lower Bound	10.3684	
			Upper Bound	18.6316	
		5% Trimmed Mean		14.6111	
		Median		15.5000	
		Variance		15.500	
		Std. Deviation		3.93700	
		Minimum		8.00	
		Maximum		19.00	
		Range		11.00	
		Interquartile Range		6.50	
		Skewness		-.885	.845
		Kurtosis		.388	1.741
	Collaborative Creating + Perspective Giving and Taking	Mean		17.6250	.70553
		95% Confidence Interval for Mean	Lower Bound	15.9567	
			Upper Bound	19.2933	
		5% Trimmed Mean		17.6944	
		Median		18.0000	
		Variance		3.982	
		Std. Deviation		1.99553	
		Minimum		14.00	

			Statistic	Std. Error
		Maximum	20.00	
		Range	6.00	
		Interquartile Range	3.25	
		Skewness	-.604	.752
		Kurtosis	.365	1.481
	Collaborative Activity Only	Mean	18.1000	.76667
		95% Confidence Interval for Mean — Lower Bound	16.3657	
		95% Confidence Interval for Mean — Upper Bound	19.8343	
		5% Trimmed Mean	18.2778	
		Median	19.0000	
		Variance	5.878	
		Std. Deviation	2.42441	
		Minimum	13.00	
		Maximum	20.00	
		Range	7.00	
		Interquartile Range	3.50	
		Skewness	-1.315	.687
		Kurtosis	.865	1.334
	Collaborative Activity + Perspective Giving and Taking	Mean	15.8333	1.19490
		95% Confidence Interval for Mean — Lower Bound	12.7618	
		95% Confidence Interval for Mean — Upper Bound	18.9049	
		5% Trimmed Mean	15.7593	
		Median	15.5000	
		Variance	8.567	
		Std. Deviation	2.92689	
		Minimum	13.00	
		Maximum	20.00	
		Range	7.00	
		Interquartile Range	5.50	
		Skewness	.388	.845
		Kurtosis	-1.810	1.741

Tests of Normality

	Condition	Kolmogorov-Smirnov[a]			Shapiro-Wilk	
		Statistic	df	Sig.	Statistic	df
CONCSUM	Collaborative Creating Only	.217	6	.200*	.946	6
	Collaborative Creating + Perspective Giving and Taking	.200	8	.200*	.922	8

		.245	10	.091	.811	10
	Collaborative Activity Only	.245	10	.091	.811	10
	Collaborative Activity + Perspective Giving and Taking	.234	6	.200*	.889	6

Tests of Normality

		Shapiro-Wilk[a]
	Condition	Sig.
CONCSUM	Collaborative Creating Only	.712
	Collaborative Creating + Perspective Giving and Taking	.450
	Collaborative Activity Only	.020
	Collaborative Activity + Perspective Giving and Taking	.310

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

CONCSUM

Histograms

Histogram
for Condition= Collaborative Creating Only

Mean = 17.63
Std. Dev. = 1.996
N = 8

Histogram

for Condition= Collaborative Creating + Perspective Giving and Taking

Mean = 17.63
Std. Dev. = 1.996
N = 8

Histogram

for Condition= Collaborative Activity Only

Mean = 18.10
Std. Dev. = 2.424
N = 10

Histogram

for Condition= Collaborative Activity + Perspective Giving and Taking

Mean = 15.83
Std. Dev. = 2.927
N = 6

Case Processing Summary

		Cases				
		Valid		Missing		Total
	Condition	N	Percent	N	Percent	N
CONTSUM	Collaborative Creating Only	6	100.0%	0	0.0%	6
	Collaborative Creating + Perspective Giving and Taking	8	100.0%	0	0.0%	8
	Collaborative Activity Only	10	100.0%	0	0.0%	10
	Collaborative Activity + Perspective Giving and Taking	6	100.0%	0	0.0%	6

Case Processing Summary

		Cases
		Total
	Condition	Percent
CONTSUM	Collaborative Creating Only	100.0%

271

	Collaborative Creating + Perspective Giving and Taking	100.0%
	Collaborative Activity Only	100.0%
	Collaborative Activity + Perspective Giving and Taking	100.0%

Descriptives

	Condition			Statistic	Std. Error
CONTSUM	Collaborative Creating Only	Mean		14.0000	1.46059
		95% Confidence Interval for Mean	Lower Bound	10.2454	
			Upper Bound	17.7546	
		5% Trimmed Mean		14.1111	
		Median		14.0000	
		Variance		12.800	
		Std. Deviation		3.57771	
		Minimum		8.00	
		Maximum		18.00	
		Range		10.00	
		Interquartile Range		5.50	
		Skewness		-.825	.845
		Kurtosis		.740	1.741
	Collaborative Creating + Perspective Giving and Taking	Mean		15.7500	.94017
		95% Confidence Interval for Mean	Lower Bound	13.5268	
			Upper Bound	17.9732	
		5% Trimmed Mean		15.8333	
		Median		16.5000	
		Variance		7.071	
		Std. Deviation		2.65922	
		Minimum		11.00	
		Maximum		19.00	
		Range		8.00	
		Interquartile Range		4.25	
		Skewness		-.798	.752
		Kurtosis		-.041	1.481
	Collaborative Activity Only	Mean		16.7000	.83066
		95% Confidence Interval for Mean	Lower Bound	14.8209	
			Upper Bound	18.5791	
		5% Trimmed Mean		16.7222	
		Median		17.0000	
		Variance		6.900	
		Std. Deviation		2.62679	

		Minimum	13.00	
		Maximum	20.00	
		Range	7.00	
		Interquartile Range	5.25	
		Skewness	-.052	.687
		Kurtosis	-1.712	1.334
	Collaborative Activity + Perspective Giving and Taking	Mean	15.0000	1.15470
		95% Confidence Interval for Mean — Lower Bound	12.0317	
		Upper Bound	17.9683	
		5% Trimmed Mean	15.0556	
		Median	16.0000	
		Variance	8.000	
		Std. Deviation	2.82843	
		Minimum	11.00	
		Maximum	18.00	
		Range	7.00	
		Interquartile Range	5.50	
		Skewness	-.716	.845
		Kurtosis	-1.481	1.741

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk	
	Condition	Statistic	df	Sig.	Statistic	df
CONTSUM	Collaborative Creating Only	.223	6	.200[*]	.933	6
	Collaborative Creating + Perspective Giving and Taking	.181	8	.200[*]	.942	8
	Collaborative Activity Only	.190	10	.200[*]	.908	10
	Collaborative Activity + Perspective Giving and Taking	.305	6	.085	.872	6

Tests of Normality

		Shapiro-Wilk[a]
	Condition	Sig.
CONTSUM	Collaborative Creating Only	.607
	Collaborative Creating + Perspective Giving and Taking	.631
	Collaborative Activity Only	.269
	Collaborative Activity + Perspective Giving and Taking	.232

273

a. Lilliefors Significance Correction

CONTSUM

Histograms

Histogram
for Condition= Collaborative Creating Only

Mean = 14.00
Std. Dev. = 3.578
N = 6

Histogram

for Condition= Collaborative Creating + Perspective Giving and Taking

Mean = 15.75
Std. Dev. = 2.659
N = 8

Histogram

for Condition= Collaborative Activity Only

Mean = 16.70
Std. Dev. = 2.627
N = 10

Histogram

for Condition= Collaborative Activity + Perspective Giving and Taking

Mean = 15.00
Std. Dev. = 2.828
N = 6
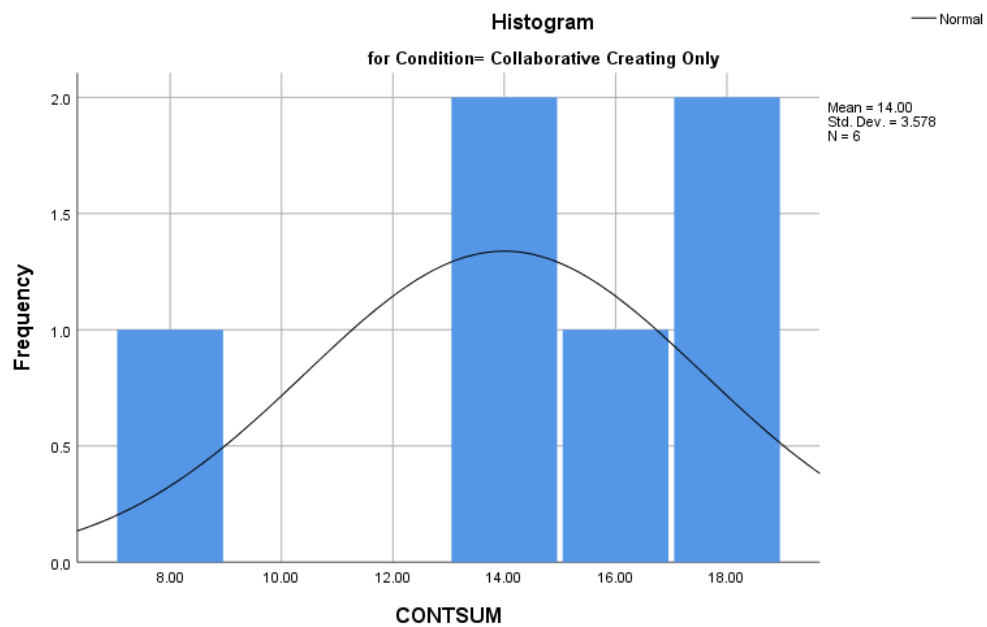
Case Processing Summary

		Cases				
		Valid		Missing		Total
	Condition	N	Percent	N	Percent	N
FDBKSUM	Collaborative Creating Only	6	100.0%	0	0.0%	6
	Collaborative Creating + Perspective Giving and Taking	8	100.0%	0	0.0%	8
	Collaborative Activity Only	10	100.0%	0	0.0%	10
	Collaborative Activity + Perspective Giving and Taking	6	100.0%	0	0.0%	6

Case Processing Summary

	Cases
	Total
Condition	Percent

FDBKSUM			100.0%
	Collaborative Creating Only		100.0%
	Collaborative Creating + Perspective Giving and Taking		100.0%
	Collaborative Activity Only		100.0%
	Collaborative Activity + Perspective Giving and Taking		100.0%

Descriptives

	Condition			Statistic	Std. Error
FDBKSUM	Collaborative Creating Only	Mean		11.5000	1.25831
		95% Confidence Interval for Mean	Lower Bound	8.2654	
			Upper Bound	14.7346	
		5% Trimmed Mean		11.6111	
		Median		12.0000	
		Variance		9.500	
		Std. Deviation		3.08221	
		Minimum		6.00	
		Maximum		15.00	
		Range		9.00	
		Interquartile Range		3.75	
		Skewness		-1.199	.845
		Kurtosis		2.091	1.741
	Collaborative Creating + Perspective Giving and Taking	Mean		14.5000	.92582
		95% Confidence Interval for Mean	Lower Bound	12.3108	
			Upper Bound	16.6892	
		5% Trimmed Mean		14.5000	
		Median		15.0000	
		Variance		6.857	
		Std. Deviation		2.61861	
		Minimum		11.00	
		Maximum		18.00	
		Range		7.00	
		Interquartile Range		4.75	
		Skewness		-.095	.752
		Kurtosis		-1.783	1.481
	Collaborative Activity Only	Mean		15.2000	.92856
		95% Confidence Interval for Mean	Lower Bound	13.0995	
			Upper Bound	17.3005	
		5% Trimmed Mean		15.1667	
		Median		14.5000	
		Variance		8.622	

		Std. Deviation	2.93636	
		Minimum	11.00	
		Maximum	20.00	
		Range	9.00	
		Interquartile Range	4.00	
		Skewness	.677	.687
		Kurtosis	-.157	1.334
	Collaborative Activity + Perspective Giving and Taking	Mean	12.8333	1.30171
		95% Confidence Interval for Mean Lower Bound	9.4872	
		95% Confidence Interval for Mean Upper Bound	16.1795	
		5% Trimmed Mean	12.8148	
		Median	12.5000	
		Variance	10.167	
		Std. Deviation	3.18852	
		Minimum	9.00	
		Maximum	17.00	
		Range	8.00	
		Interquartile Range	6.50	
		Skewness	.226	.845
		Kurtosis	-1.626	1.741

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk	
	Condition	Statistic	df	Sig.	Statistic	df
FDBKSUM	Collaborative Creating Only	.269	6	.200[*]	.896	6
	Collaborative Creating + Perspective Giving and Taking	.217	8	.200[*]	.916	8
	Collaborative Activity Only	.193	10	.200[*]	.908	10
	Collaborative Activity + Perspective Giving and Taking	.173	6	.200[*]	.941	6

Tests of Normality

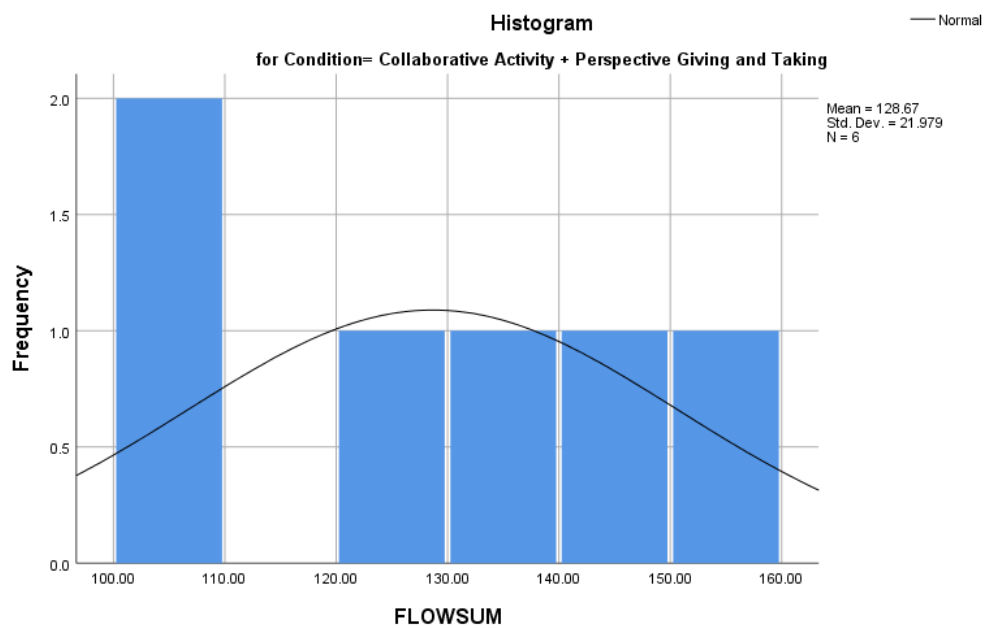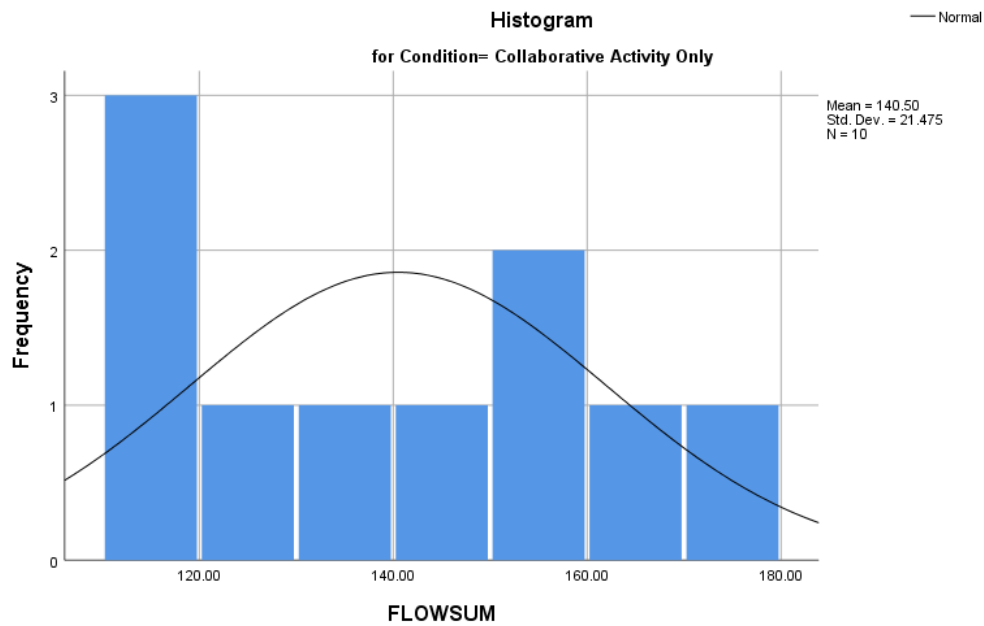|		Shapiro-Wilk[a]
	Condition	Sig.
FDBKSUM	Collaborative Creating Only	.352
	Collaborative Creating + Perspective Giving and Taking	.397
	Collaborative Activity Only	.269
	Collaborative Activity + Perspective Giving and Taking	.667

FDBKSUM

Histograms

Histogram

for Condition= Collaborative Creating Only

Mean = 11.50
Std. Dev. = 3.082
N = 6

Histogram

for Condition= Collaborative Creating + Perspective Giving and Taking

Mean = 14.50
Std. Dev. = 2.619
N = 8

Histogram

for Condition= Collaborative Activity Only

Mean = 15.20
Std. Dev. = 2.936
N = 10

Histogram

for Condition= Collaborative Activity + Perspective Giving and Taking

Mean = 12.83
Std. Dev. = 3.189
N = 6
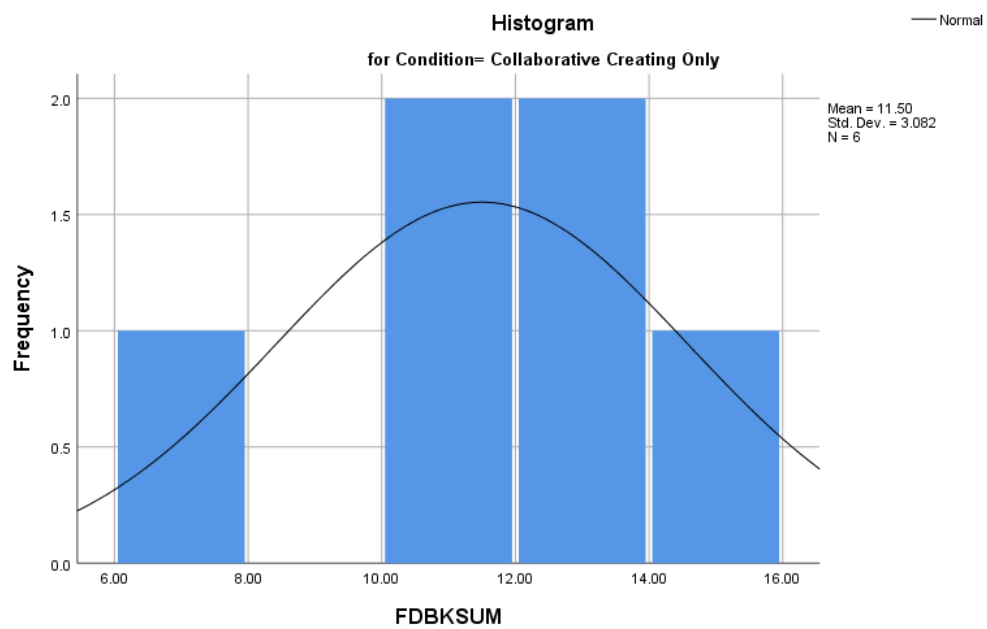
Condition

Case Processing Summary

		Cases					
		Valid		Missing		Total	
	Condition	N	Percent	N	Percent	N	
GOALSUM	Collaborative Creating Only	6	100.0%	0	0.0%	6	
	Collaborative Creating + Perspective Giving and Taking	8	100.0%	0	0.0%	8	
	Collaborative Activity Only	10	100.0%	0	0.0%	10	
	Collaborative Activity + Perspective Giving and Taking	6	100.0%	0	0.0%	6	

Case Processing Summary

		Cases
		Total
	Condition	Percent
GOALSUM	Collaborative Creating Only	100.0%
	Collaborative Creating + Perspective Giving and Taking	100.0%
	Collaborative Activity Only	100.0%
	Collaborative Activity + Perspective Giving and Taking	100.0%

Descriptives

	Condition		Statistic	Std. Error
GOALSUM	Collaborative Creating Only	Mean	12.5000	1.17615
		95% Confidence Interval for Mean Lower Bound	9.4766	
		Upper Bound	15.5234	
		5% Trimmed Mean	12.5556	
		Median	12.5000	
		Variance	8.300	
		Std. Deviation	2.88097	
		Minimum	8.00	
		Maximum	16.00	
		Range	8.00	
		Interquartile Range	5.00	
		Skewness	-.452	.845
		Kurtosis	-.109	1.741
	Collaborative Creating + Perspective Giving and Taking	Mean	14.2500	1.12995
		95% Confidence Interval for Mean Lower Bound	11.5781	
		Upper Bound	16.9219	
		5% Trimmed Mean	14.2222	
		Median	13.5000	
		Variance	10.214	
		Std. Deviation	3.19598	
		Minimum	10.00	
		Maximum	19.00	
		Range	9.00	
		Interquartile Range	5.50	
		Skewness	.713	.752
		Kurtosis	-.382	1.481
	Collaborative Activity Only	Mean	16.0000	.81650
		95% Confidence Interval for Lower Bound	14.1530	

		Mean	Upper Bound	17.8470	
		5% Trimmed Mean		16.0000	
		Median		15.5000	
		Variance		6.667	
		Std. Deviation		2.58199	
		Minimum		12.00	
		Maximum		20.00	
		Range		8.00	
		Interquartile Range		3.75	
		Skewness		.387	.687
		Kurtosis		-.391	1.334
	Collaborative Activity + Perspective Giving and Taking	Mean		15.6667	.84327
		95% Confidence Interval for Mean	Lower Bound	13.4990	
			Upper Bound	17.8344	
		5% Trimmed Mean		15.6296	
		Median		16.0000	
		Variance		4.267	
		Std. Deviation		2.06559	
		Minimum		13.00	
		Maximum		19.00	
		Range		6.00	
		Interquartile Range		3.00	
		Skewness		.461	.845
		Kurtosis		.740	1.741

Tests of Normality

	Condition	Kolmogorov-Smirnov[a]			Shapiro-Wilk	
		Statistic	df	Sig.	Statistic	df
GOALSUM	Collaborative Creating Only	.141	6	.200*	.973	6
	Collaborative Creating + Perspective Giving and Taking	.281	8	.062	.871	8
	Collaborative Activity Only	.151	10	.200*	.936	10
	Collaborative Activity + Perspective Giving and Taking	.269	6	.199	.915	6

Tests of Normality

	Shapiro-Wilk[a]
Condition	Sig.

GOALSUM	Collaborative Creating Only	.913
	Collaborative Creating + Perspective Giving and Taking	.154
	Collaborative Activity Only	.505
	Collaborative Activity + Perspective Giving and Taking	.473

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

GOALSUM

Histograms

Histogram
for Condition= Collaborative Creating Only

Mean = 12.50
Std. Dev. = 2.881
N = 6

Histogram
for Condition= Collaborative Creating + Perspective Giving and Taking

Mean = 14.25
Std. Dev. = 3.196
N = 8

Histogram
for Condition= Collaborative Activity Only

Mean = 16.00
Std. Dev. = 2.582
N = 10

285

Histogram

for Condition= Collaborative Activity + Perspective Giving and Taking

Mean = 15.67
Std. Dev. = 2.066
N = 6

Condition

Case Processing Summary

		Cases				
		Valid		Missing		Total
	Condition	N	Percent	N	Percent	N
LOSSSUM	Collaborative Creating Only	6	100.0%	0	0.0%	6
	Collaborative Creating + Perspective Giving and Taking	8	100.0%	0	0.0%	8
	Collaborative Activity Only	10	100.0%	0	0.0%	10
	Collaborative Activity + Perspective Giving and Taking	6	100.0%	0	0.0%	6

Case Processing Summary

		Cases
		Total
	Condition	Percent
LOSSSUM	Collaborative Creating Only	100.0%

Condition				Statistic	Std. Error
Collaborative Creating + Perspective Giving and Taking				100.0%	
Collaborative Activity Only				100.0%	
Collaborative Activity + Perspective Giving and Taking				100.0%	

Descriptives

	Condition			Statistic	Std. Error
LOSSSUM	Collaborative Creating Only	Mean		13.8333	1.70131
		95% Confidence Interval for Mean	Lower Bound	9.4600	
			Upper Bound	18.2067	
		5% Trimmed Mean		13.9815	
		Median		16.0000	
		Variance		17.367	
		Std. Deviation		4.16733	
		Minimum		8.00	
		Maximum		17.00	
		Range		9.00	
		Interquartile Range		8.25	
		Skewness		-.943	.845
		Kurtosis		-1.727	1.741
	Collaborative Creating + Perspective Giving and Taking	Mean		15.1250	1.54038
		95% Confidence Interval for Mean	Lower Bound	11.4826	
			Upper Bound	18.7674	
		5% Trimmed Mean		15.1944	
		Median		15.0000	
		Variance		18.982	
		Std. Deviation		4.35685	
		Minimum		9.00	
		Maximum		20.00	
		Range		11.00	
		Interquartile Range		9.00	
		Skewness		-.195	.752
		Kurtosis		-1.593	1.481
	Collaborative Activity Only	Mean		17.2000	1.47422
		95% Confidence Interval for Mean	Lower Bound	13.8651	
			Upper Bound	20.5349	
		5% Trimmed Mean		17.7222	
		Median		19.0000	
		Variance		21.733	
		Std. Deviation		4.66190	

		Minimum	5.00	
		Maximum	20.00	
		Range	15.00	
		Interquartile Range	3.75	
		Skewness	-2.412	.687
		Kurtosis	6.050	1.334
	Collaborative Activity + Perspective Giving and Taking	Mean	13.3333	1.92642
		95% Confidence Interval for Mean Lower Bound	8.3813	
		Upper Bound	18.2854	
		5% Trimmed Mean	13.2593	
		Median	12.5000	
		Variance	22.267	
		Std. Deviation	4.71876	
		Minimum	8.00	
		Maximum	20.00	
		Range	12.00	
		Interquartile Range	8.25	
		Skewness	.355	.845
		Kurtosis	-1.704	1.741

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk	
	Condition	Statistic	df	Sig.	Statistic	df
LOSSSUM	Collaborative Creating Only	.365	6	.012	.743	6
	Collaborative Creating + Perspective Giving and Taking	.188	8	.200[*]	.908	8
	Collaborative Activity Only	.350	10	.001	.644	10
	Collaborative Activity + Perspective Giving and Taking	.260	6	.200[*]	.920	6

Tests of Normality

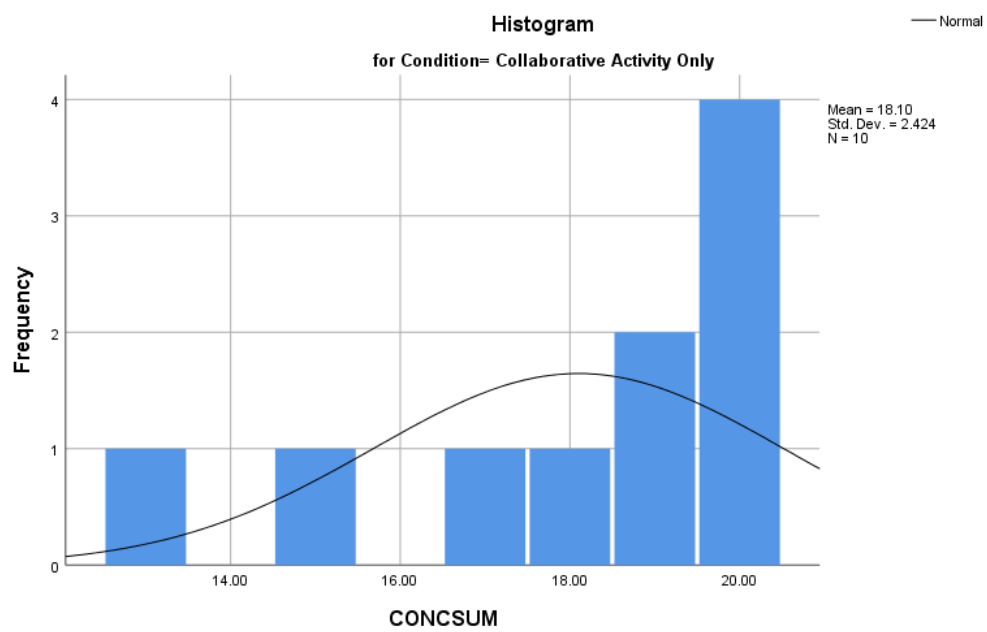|		Shapiro-Wilk[a]
	Condition	Sig.
LOSSSUM	Collaborative Creating Only	.017
	Collaborative Creating + Perspective Giving and Taking	.338
	Collaborative Activity Only	.000
	Collaborative Activity + Perspective Giving and Taking	.507

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

LOSSSUM

Histograms

Histogram

for Condition= Collaborative Creating Only

Mean = 13.83
Std. Dev. = 4.167
N = 6

Histogram

for Condition= Collaborative Creating + Perspective Giving and Taking

Mean = 15.13
Std. Dev. = 4.357
N = 8

Histogram

for Condition= Collaborative Activity Only

Mean = 17.20
Std. Dev. = 4.662
N = 10

Histogram
for Condition= Collaborative Activity + Perspective Giving and Taking

Mean = 13.33
Std. Dev. = 4.719
N = 6
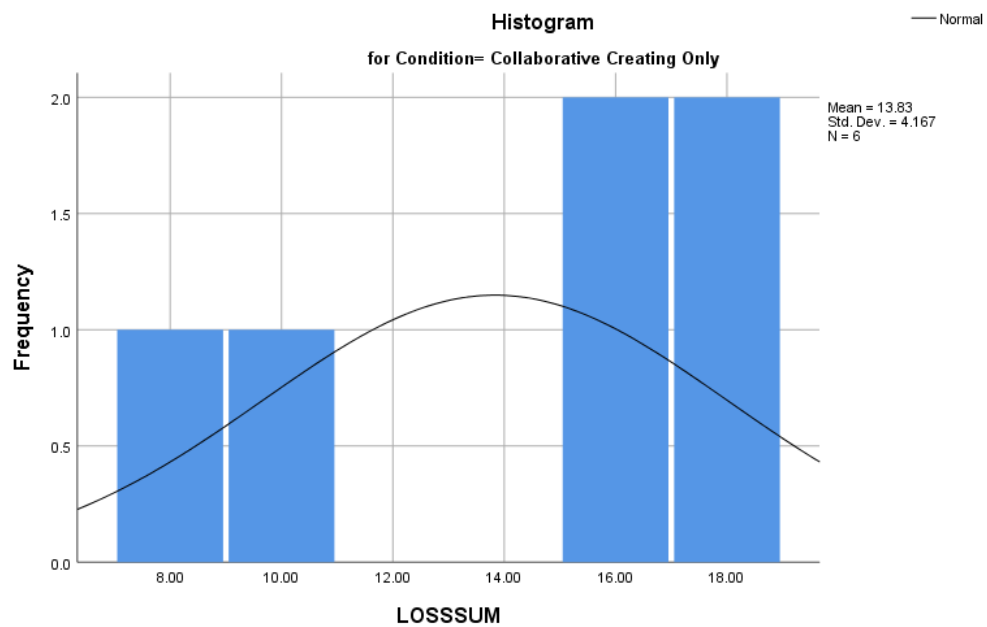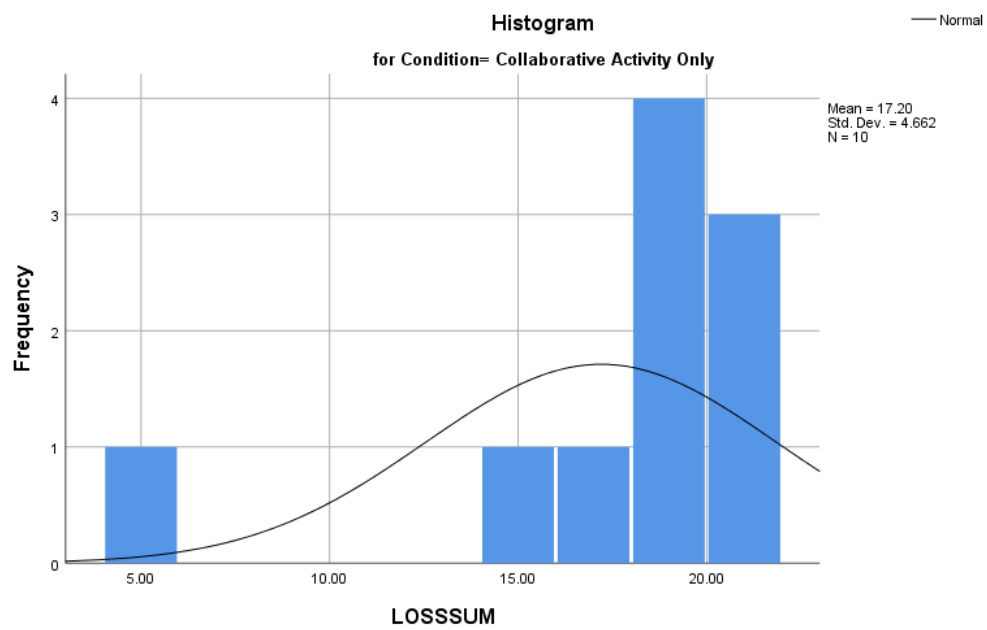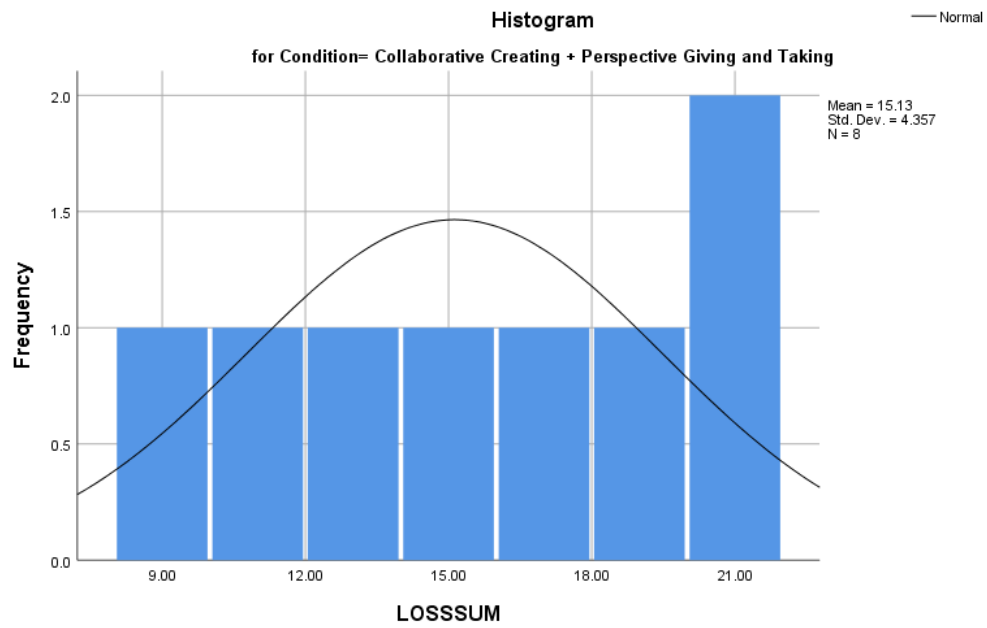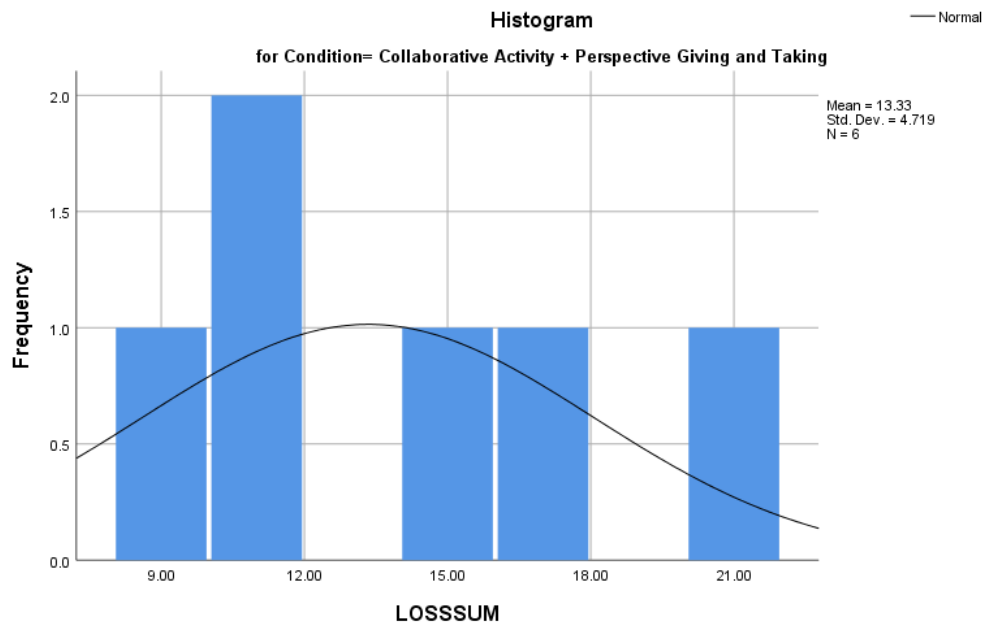
Case Processing Summary

		Cases					
		Valid		Missing		Total	
	Condition	N	Percent	N	Percent	N	
TRANSUM	Collaborative Creating Only	6	100.0%	0	0.0%	6	
	Collaborative Creating + Perspective Giving and Taking	8	100.0%	0	0.0%	8	
	Collaborative Activity Only	10	100.0%	0	0.0%	10	
	Collaborative Activity + Perspective Giving and Taking	6	100.0%	0	0.0%	6	

Case Processing Summary

		Cases
		Total
	Condition	Percent
TRANSUM	Collaborative Creating Only	100.0%
	Collaborative Creating + Perspective Giving and Taking	100.0%
	Collaborative Activity Only	100.0%
	Collaborative Activity + Perspective Giving and Taking	100.0%

Descriptives

Condition			Statistic	Std. Error
TRANSUM	Collaborative Creating Only	Mean	13.1667	1.44722
		95% Confidence Interval for Mean — Lower Bound	9.4465	
		95% Confidence Interval for Mean — Upper Bound	16.8869	
		5% Trimmed Mean	13.2963	
		Median	13.5000	
		Variance	12.567	
		Std. Deviation	3.54495	
		Minimum	7.00	
		Maximum	17.00	
		Range	10.00	
		Interquartile Range	5.50	
		Skewness	-1.054	.845
		Kurtosis	1.413	1.741
	Collaborative Creating + Perspective Giving and Taking	Mean	11.5000	1.06904
		95% Confidence Interval for Mean — Lower Bound	8.9721	
		95% Confidence Interval for Mean — Upper Bound	14.0279	
		5% Trimmed Mean	11.7222	
		Median	13.0000	
		Variance	9.143	
		Std. Deviation	3.02372	
		Minimum	5.00	
		Maximum	14.00	
		Range	9.00	
		Interquartile Range	3.25	
		Skewness	-1.798	.752
		Kurtosis	2.825	1.481
	Collaborative Activity Only	Mean	11.0000	1.65328
		95% Confidence Interval for Mean — Lower Bound	7.2600	
		95% Confidence Interval for Mean — Upper Bound	14.7400	
		5% Trimmed Mean	11.0000	
		Median	10.0000	
		Variance	27.333	
		Std. Deviation	5.22813	
		Minimum	4.00	
		Maximum	18.00	
		Range	14.00	

		Interquartile Range	10.00	
		Skewness	.175	.687
		Kurtosis	-1.547	1.334
	Collaborative Activity + Perspective Giving and Taking	Mean	11.5000	1.64823
		95% Confidence Interval for Mean — Lower Bound	7.2631	
		Upper Bound	15.7369	
		5% Trimmed Mean	11.6667	
		Median	12.5000	
		Variance	16.300	
		Std. Deviation	4.03733	
		Minimum	4.00	
		Maximum	16.00	
		Range	12.00	
		Interquartile Range	4.50	
		Skewness	-1.477	.845
		Kurtosis	3.194	1.741

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk	
	Condition	Statistic	df	Sig.	Statistic	df
TRANSUM	Collaborative Creating Only	.204	6	.200[*]	.929	6
	Collaborative Creating + Perspective Giving and Taking	.316	8	.018	.741	8
	Collaborative Activity Only	.149	10	.200[*]	.921	10
	Collaborative Activity + Perspective Giving and Taking	.284	6	.142	.859	6

Tests of Normality

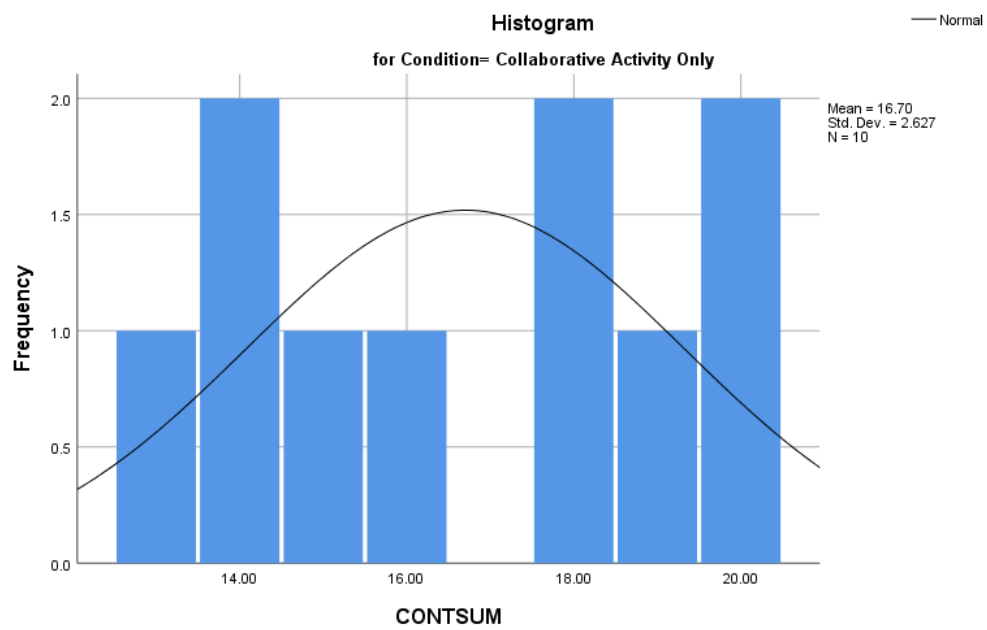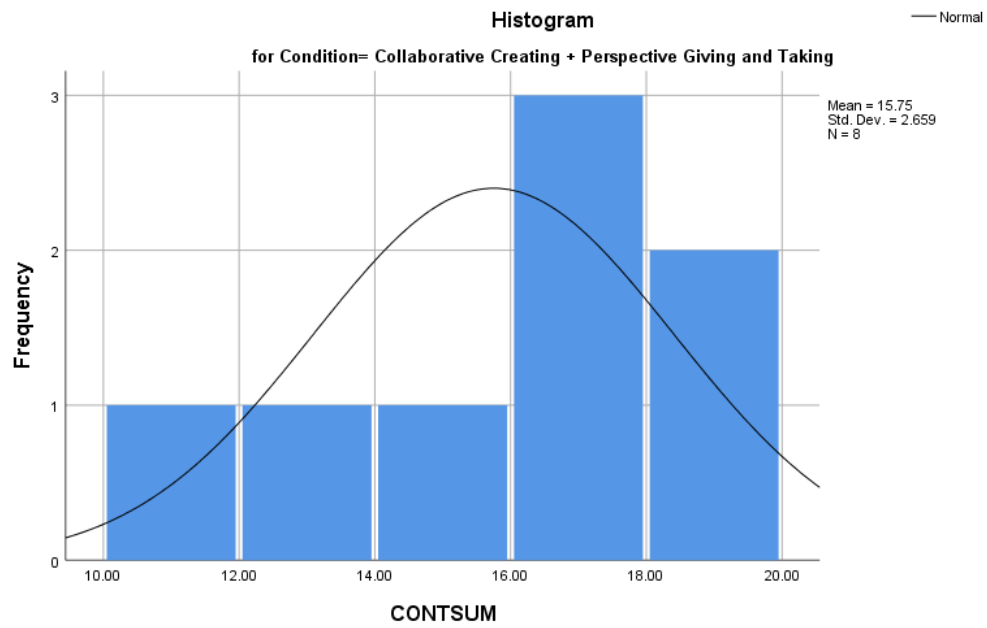|		Shapiro-Wilk[a]
	Condition	Sig.
TRANSUM	Collaborative Creating Only	.574
	Collaborative Creating + Perspective Giving and Taking	.006
	Collaborative Activity Only	.368
	Collaborative Activity + Perspective Giving and Taking	.185

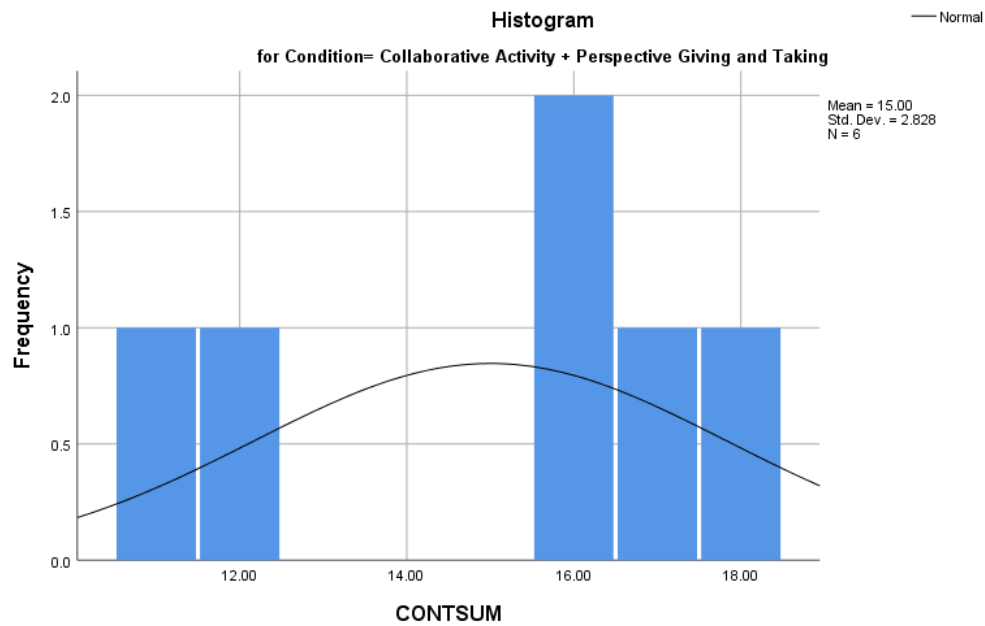*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

TRANSUM

Histograms

Histogram
for Condition= Collaborative Creating Only

Mean = 13.17
Std. Dev. = 3.545
N = 6

Histogram

for Condition= Collaborative Creating + Perspective Giving and Taking

Mean = 11.50
Std. Dev. = 3.024
N = 8

TRANSUM

Histogram

for Condition= Collaborative Activity Only

Mean = 11.00
Std. Dev. = 5.228
N = 10

TRANSUM

295

Histogram

for Condition= Collaborative Activity + Perspective Giving and Taking

Mean = 11.50
Std. Dev. = 4.037
N = 6

TRANSUM
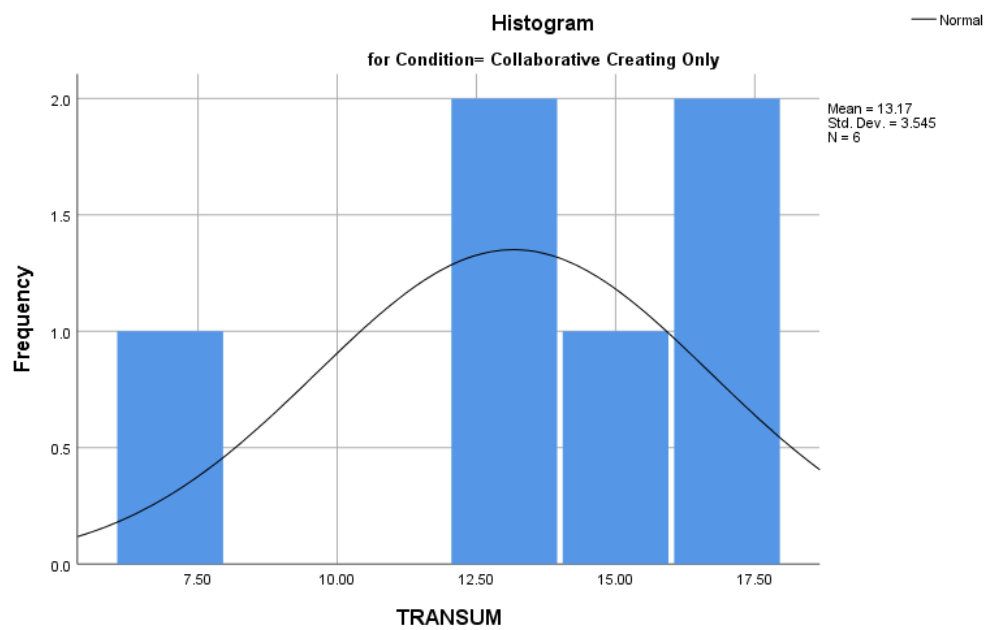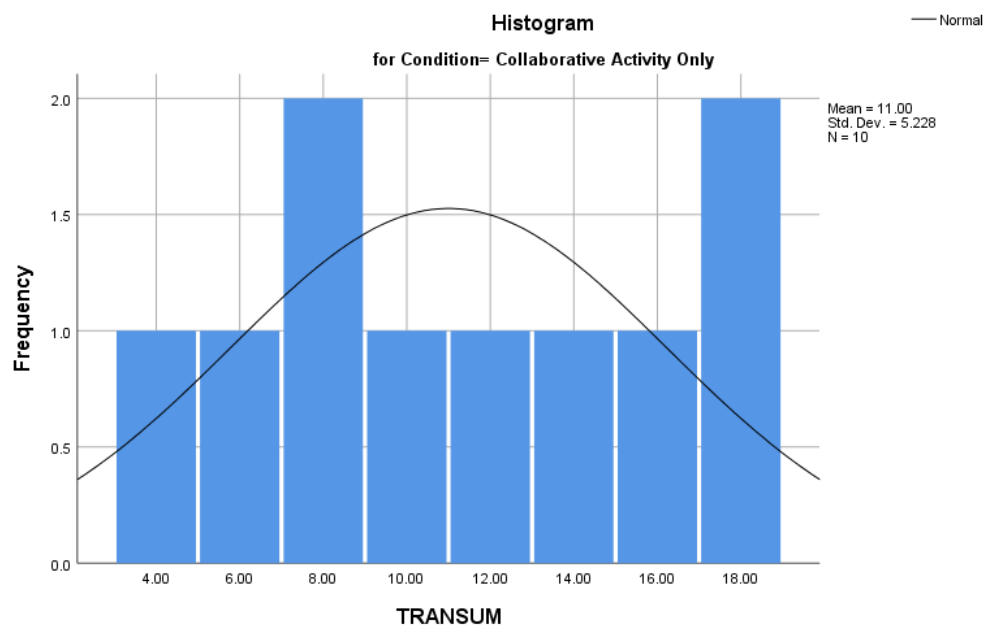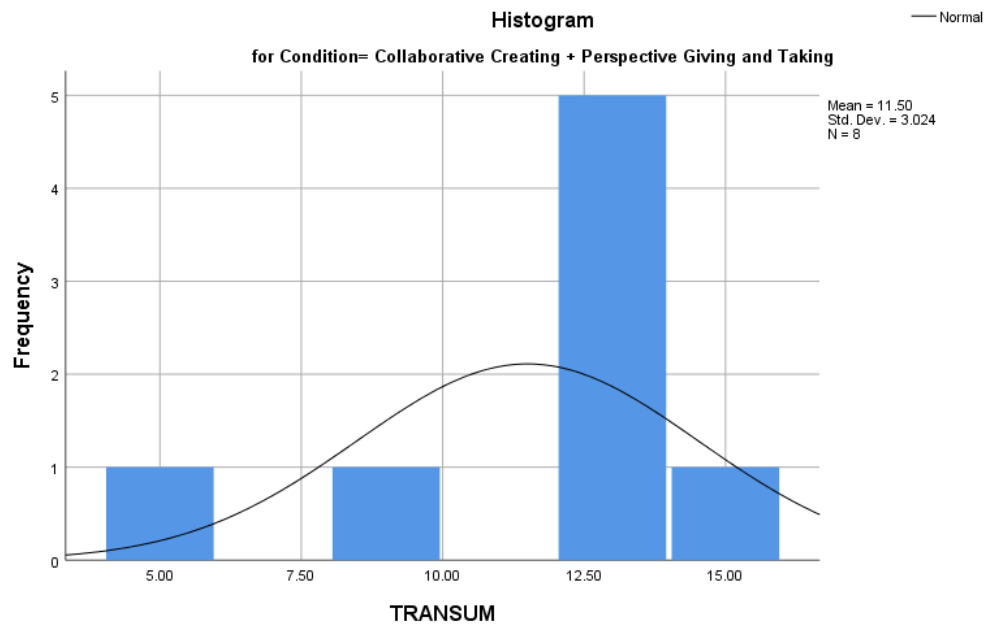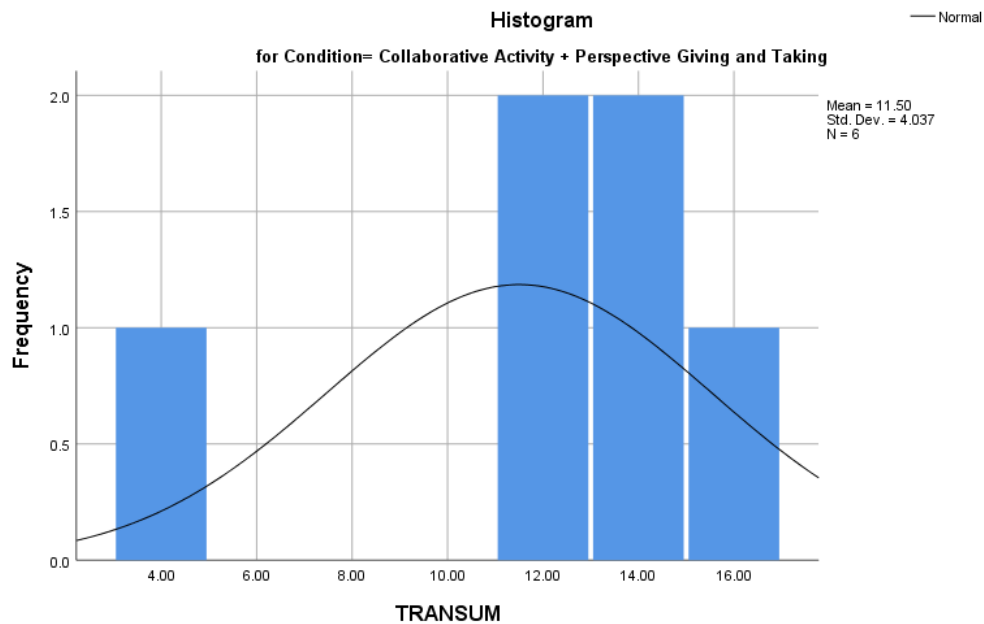
Case Processing Summary

		Cases				
		Valid		Missing		Total
	Condition	N	Percent	N	Percent	N
ENJYSUM	Collaborative Creating Only	6	100.0%	0	0.0%	6
	Collaborative Creating + Perspective Giving and Taking	8	100.0%	0	0.0%	8
	Collaborative Activity Only	10	100.0%	0	0.0%	10
	Collaborative Activity + Perspective Giving and Taking	6	100.0%	0	0.0%	6

Case Processing Summary

		Cases
		Total
	Condition	Percent
ENJYSUM	Collaborative Creating Only	100.0%
	Collaborative Creating + Perspective Giving and Taking	100.0%
	Collaborative Activity Only	100.0%
	Collaborative Activity + Perspective Giving and Taking	100.0%

Descriptives

	Condition			Statistic	Std. Error
ENJYSUM	Collaborative Creating Only	Mean		14.6667	.88192
		95% Confidence Interval for Mean	Lower Bound	12.3996	
			Upper Bound	16.9337	
		5% Trimmed Mean		14.7407	
		Median		15.0000	
		Variance		4.667	
		Std. Deviation		2.16025	
		Minimum		11.00	
		Maximum		17.00	
		Range		6.00	
		Interquartile Range		3.00	
		Skewness		-.965	.845
		Kurtosis		.729	1.741
	Collaborative Creating + Perspective Giving and Taking	Mean		16.2500	.99553
		95% Confidence Interval for Mean	Lower Bound	13.8960	
			Upper Bound	18.6040	
		5% Trimmed Mean		16.3889	
		Median		17.5000	
		Variance		7.929	
		Std. Deviation		2.81577	
		Minimum		11.00	
		Maximum		19.00	
		Range		8.00	
		Interquartile Range		4.25	
		Skewness		-1.209	.752
		Kurtosis		.319	1.481
	Collaborative Activity Only	Mean		15.2000	1.38884
		95% Confidence Interval for Mean	Lower Bound	12.0582	
			Upper Bound	18.3418	
		5% Trimmed Mean		15.4444	
		Median		15.5000	
		Variance		19.289	
		Std. Deviation		4.39191	
		Minimum		6.00	
		Maximum		20.00	
		Range		14.00	

		Interquartile Range	6.00	
		Skewness	-.935	.687
		Kurtosis	.807	1.334
	Collaborative Activity + Perspective Giving and Taking	Mean	14.5000	1.17615
		95% Confidence Interval for Mean	Lower Bound	11.4766	
			Upper Bound	17.5234	
		5% Trimmed Mean	14.3333	
		Median	13.5000	
		Variance	8.300	
		Std. Deviation	2.88097	
		Minimum	12.00	
		Maximum	20.00	
		Range	8.00	
		Interquartile Range	3.50	
		Skewness	1.807	.845
		Kurtosis	3.549	1.741

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk	
	Condition	Statistic	df	Sig.	Statistic	df
ENJYSUM	Collaborative Creating Only	.231	6	.200[*]	.905	6
	Collaborative Creating + Perspective Giving and Taking	.233	8	.200[*]	.840	8
	Collaborative Activity Only	.192	10	.200[*]	.908	10
	Collaborative Activity + Perspective Giving and Taking	.264	6	.200[*]	.809	6

Tests of Normality

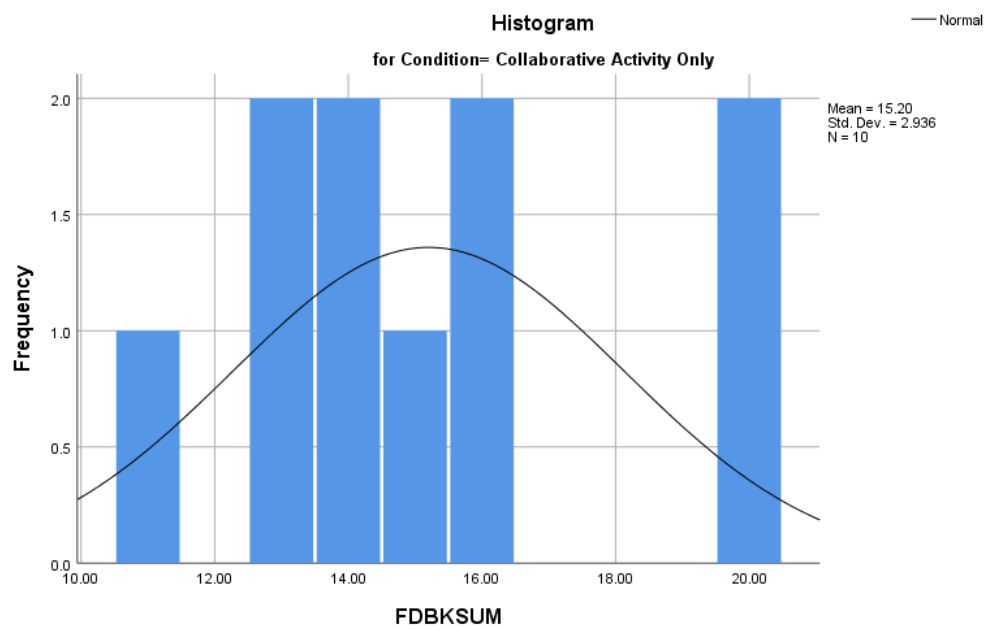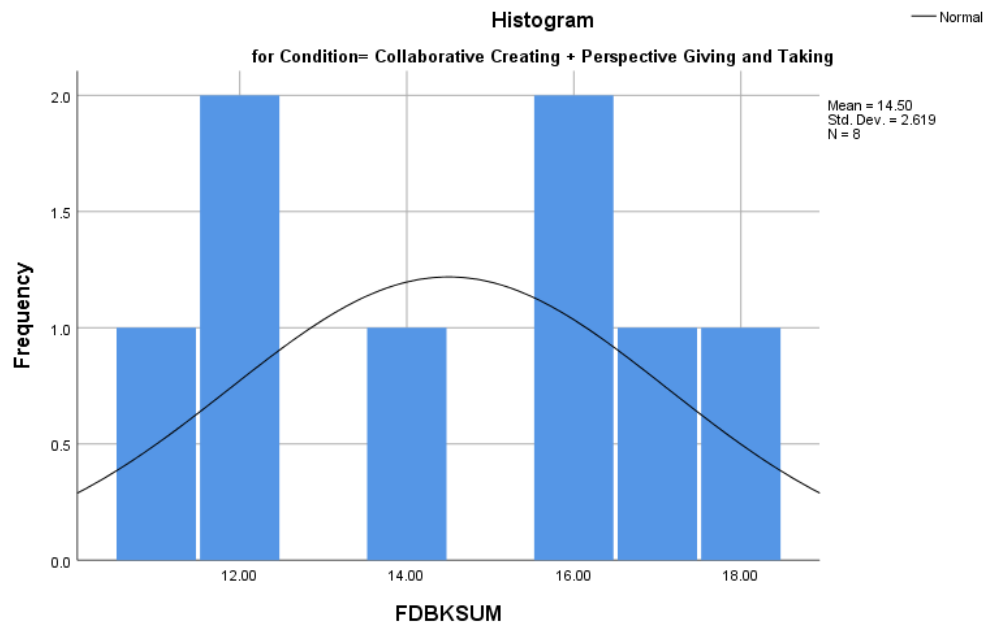|		Shapiro-Wilk[a]
	Condition	Sig.
ENJYSUM	Collaborative Creating Only	.405
	Collaborative Creating + Perspective Giving and Taking	.076
	Collaborative Activity Only	.266
	Collaborative Activity + Perspective Giving and Taking	.070

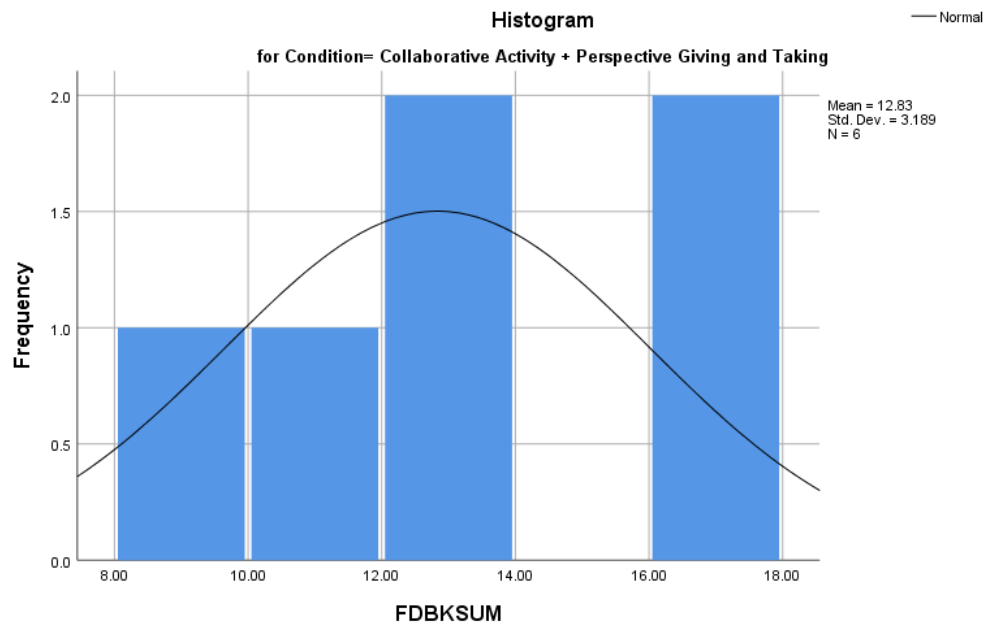*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

ENJYSUM

Histograms
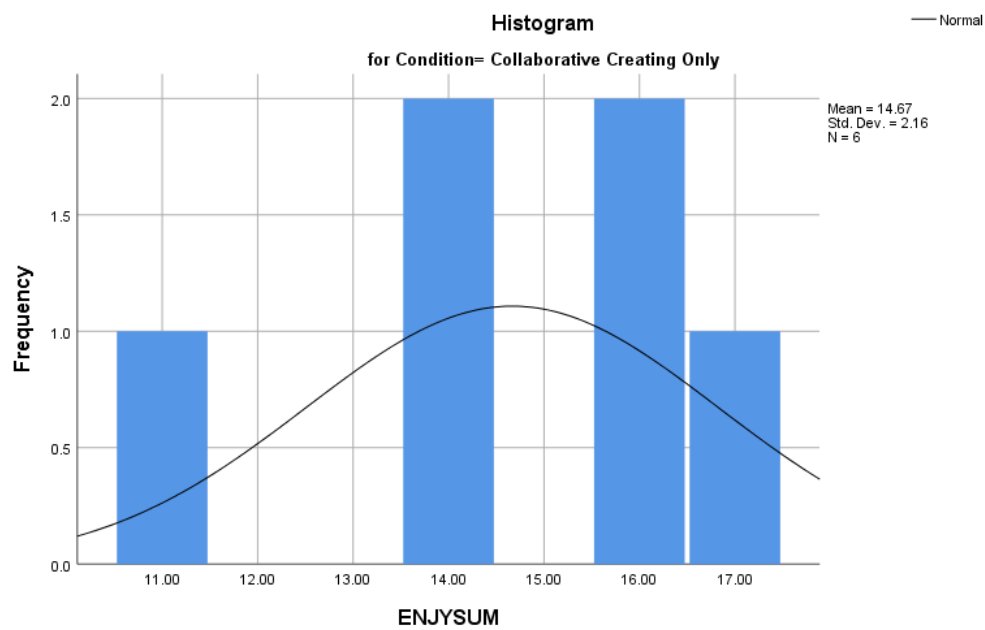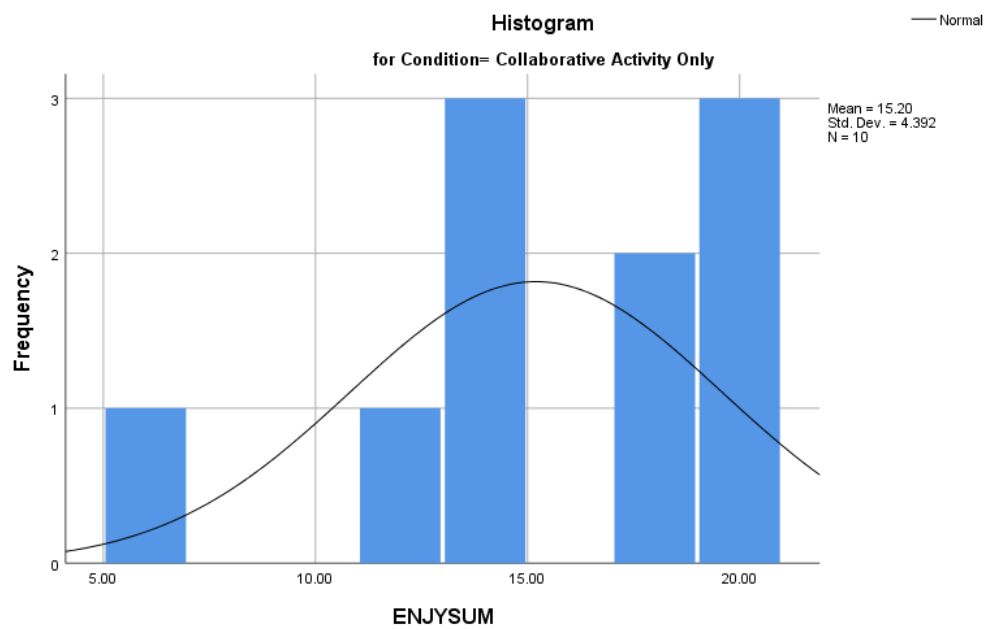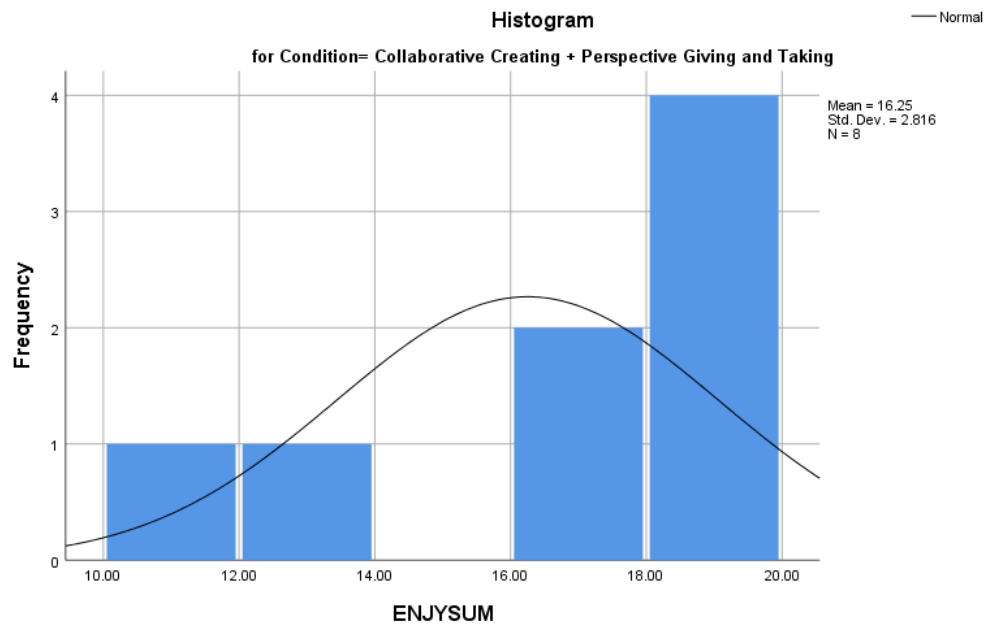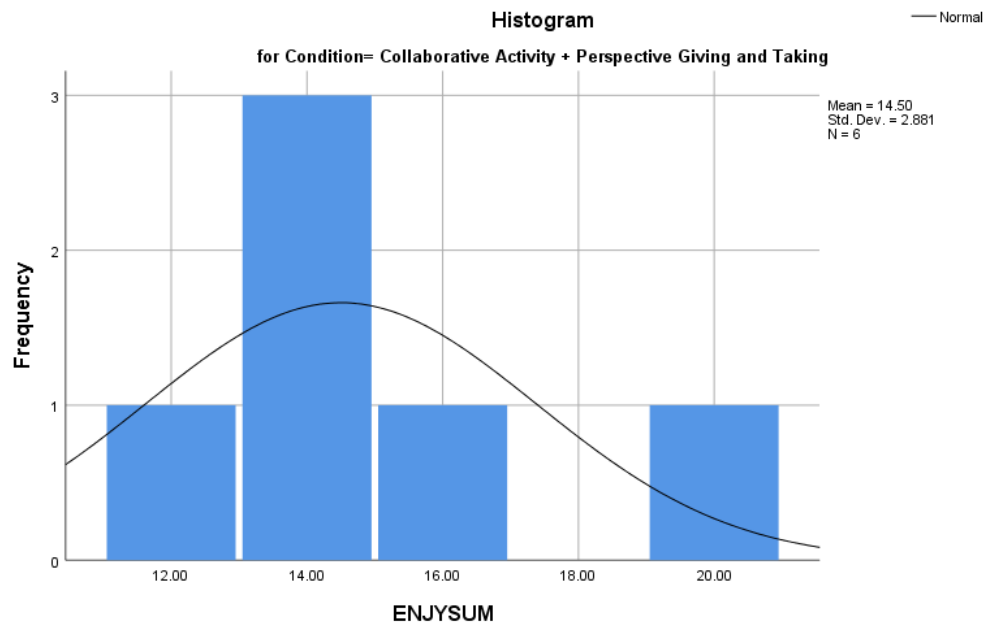
Histogram

for Condition= Collaborative Creating Only

Mean = 14.67
Std. Dev. = 2.16
N = 6

Histogram

for Condition= Collaborative Creating + Perspective Giving and Taking

Mean = 16.25
Std. Dev. = 2.816
N = 8

Histogram

for Condition= Collaborative Activity Only

Mean = 15.20
Std. Dev. = 4.392
N = 10

300

Histogram

for Condition= Collaborative Activity + Perspective Giving and Taking

Mean = 14.50
Std. Dev. = 2.881
N = 6

ENJYSUM

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of FLOWSUM is the same across categories of Condition.	Independent-Samples Kruskal-Wallis Test	.487	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Nonparametric Tests

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of ACTSUM is the same across categories of Condition.	Independent-Samples Kruskal-Wallis Test	.765	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

```
*Nonparametric Tests: Independent Samples.
NPTESTS
  /INDEPENDENT TEST (CHALSUM) GROUP (Condition)
  /MISSING SCOPE=ANALYSIS USERMISSING=EXCLUDE
  /CRITERIA ALPHA=0.05  CILEVEL=95.
```

Nonparametric Tests

Notes

Output Created		13-FEB-2020 13:50:15
Comments		
Input	Data	C:\Users\CYP634\Downloads\ Study 1 Raw Data 11.02.2020.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	39

Syntax		NPTESTS /INDEPENDENT TEST (CHALSUM) GROUP (Condition) /MISSING SCOPE=ANALYSIS USERMISSING=EXCLUDE /CRITERIA ALPHA=0.05 CILEVEL=95.
Resources	Processor Time	00:00:00.09
	Elapsed Time	00:00:00.07

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of CHALSUM is the same across categories of Condition.	Independent-Samples Kruskal-Wallis Test	.458	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of CONCSUM is the same across categories of Condition.	Independent-Samples Kruskal-Wallis Test	.102	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

*

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of CONTSUM is the same across categories of Condition.	Independent-Samples Kruskal-Wallis Test	.405	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of FDBKSUM is the same across categories of Condition.	Independent-Samples Kruskal-Wallis Test	.144	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of GOALSUM is the same across categories of Condition.	Independent-Samples Kruskal-Wallis Test	.091	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of LOSSSUM is the same across categories of Condition.	Independent-Samples Kruskal-Wallis Test	.204	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

305

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of TRANSUM is the same across categories of Condition.	Independent-Samples Kruskal-Wallis Test	.761	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of ENJYSUM is the same across categories of Condition.	Independent-Samples Kruskal-Wallis Test	.575	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

null : null

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of FLOWSUM is the same across categories of Creating.	Independent-Samples Mann-Whitney U Test	.448[1]	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

[1] Exact significance is displayed for this test.

306

null : null

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of ACTSUM is the same across categories of Creating.	Independent-Samples Mann-Whitney U Test	.759[1]	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

[1]Exact significance is displayed for this test.

Nonparametric Tests

Notes

Output Created		13-FEB-2020 14:28:55
Comments		
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	Split File	<none>
	N of Rows in Working Data File	39

Syntax		NPTESTS /INDEPENDENT TEST (CHALSUM) GROUP (Creating) /MISSING SCOPE=ANALYSIS USERMISSING=EXCLUDE /CRITERIA ALPHA=0.05 CILEVEL=95.
Resources	Processor Time	00:00:00.08
	Elapsed Time	00:00:00.08

null : null

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of CHALSUM is the same across categories of Creating.	Independent-Samples Mann-Whitney U Test	.313[1]	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

[1]Exact significance is displayed for this test.

```
*Nonparametric Tests: Independent Samples.
NPTESTS
  /INDEPENDENT TEST (CONCSUM) GROUP (Creating)
  /MISSING SCOPE=ANALYSIS USERMISSING=EXCLUDE
  /CRITERIA ALPHA=0.05  CILEVEL=95.
```

Nonparametric Tests

Notes

Output Created		13-FEB-2020 14:29:23
Comments		
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	Active Dataset	DataSet1
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	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	39

Syntax		NPTESTS /INDEPENDENT TEST (CONCSUM) GROUP (Creating) /MISSING SCOPE=ANALYSIS USERMISSING=EXCLUDE /CRITERIA ALPHA=0.05 CILEVEL=95.
Resources	Processor Time	00:00:00.08
	Elapsed Time	00:00:00.07

null : null

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of CONCSUM is the same across categories of Creating.	Independent-Samples Mann-Whitney U Test	.400[1]	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

[1]Exact significance is displayed for this test.

```
*Nonparametric Tests: Independent Samples.
NPTESTS
  /INDEPENDENT TEST (CONTSUM) GROUP (Creating)
  /MISSING SCOPE=ANALYSIS USERMISSING=EXCLUDE
  /CRITERIA ALPHA=0.05  CILEVEL=95.
```

Nonparametric Tests

Notes

Output Created		13-FEB-2020 14:29:36
Comments		
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	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	39

Syntax		NPTESTS /INDEPENDENT TEST (CONTSUM) GROUP (Creating) /MISSING SCOPE=ANALYSIS USERMISSING=EXCLUDE /CRITERIA ALPHA=0.05 CILEVEL=95.
Resources	Processor Time	00:00:00.09
	Elapsed Time	00:00:00.08

null : null

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of CONTSUM is the same across categories of Creating.	Independent-Samples Mann-Whitney U Test	.400[1]	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

[1]Exact significance is displayed for this test.

```
*Nonparametric Tests: Independent Samples.
NPTESTS
  /INDEPENDENT TEST (FDBKSUM) GROUP (Creating)
  /MISSING SCOPE=ANALYSIS USERMISSING=EXCLUDE
  /CRITERIA ALPHA=0.05  CILEVEL=95.
```

Nonparametric Tests

Notes

Output Created		13-FEB-2020 14:29:55
Comments		
Input	Data	C:\Users\CYP634\Downloads\ Study 1 Raw Data 11.02.2020.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	39

Syntax		NPTESTS /INDEPENDENT TEST (FDBKSUM) GROUP (Creating) /MISSING SCOPE=ANALYSIS USERMISSING=EXCLUDE /CRITERIA ALPHA=0.05 CILEVEL=95.
Resources	Processor Time	00:00:00.11
	Elapsed Time	00:00:00.08

null : null

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of FDBKSUM is the same across categories of Creating.	Independent-Samples Mann-Whitney U Test	.448[1]	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

[1]Exact significance is displayed for this test.

```
*Nonparametric Tests: Independent Samples.
NPTESTS
  /INDEPENDENT TEST (GOALSUM) GROUP (Creating)
  /MISSING SCOPE=ANALYSIS USERMISSING=EXCLUDE
  /CRITERIA ALPHA=0.05  CILEVEL=95.
```

Nonparametric Tests

Notes

Output Created		13-FEB-2020 14:30:23
Comments		
Input	Data	C:\Users\CYP634\Downloads\Study 1 Raw Data 11.02.2020.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	39

Syntax		NPTESTS
		/INDEPENDENT TEST
		(GOALSUM) GROUP
		(Creating)
		/MISSING
		SCOPE=ANALYSIS
		USERMISSING=EXCLUDE
		/CRITERIA ALPHA=0.05
		CILEVEL=95.
Resources	Processor Time	00:00:00.09
	Elapsed Time	00:00:00.08

null : null

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of GOALSUM is the same across categories of Creating.	Independent-Samples Mann-Whitney U Test	.015[1]	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

[1] Exact significance is displayed for this test.

```
*Nonparametric Tests: Independent Samples.
NPTESTS
  /INDEPENDENT TEST (LOSSSUM) GROUP (Creating)
  /MISSING SCOPE=ANALYSIS USERMISSING=EXCLUDE
  /CRITERIA ALPHA=0.05  CILEVEL=95.
```

Nonparametric Tests

Notes

Output Created		13-FEB-2020 14:31:19
Comments		
Input	Data	C:\Users\CYP634\Downloads\ Study 1 Raw Data 11.02.2020.sav
	Active Dataset	DataSet1
	Filter	<none>
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Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of LOSSSUM is the same across categories of Creating.	Independent-Samples Mann-Whitney U Test	.313[1]	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

[1] Exact significance is displayed for this test.

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*Nonparametric Tests: Independent Samples.
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Nonparametric Tests

Notes

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null : null

Hypothesis Test Summary

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1	The distribution of TRANSUM is the same across categories of Creating.	Independent-Samples Mann-Whitney U Test	.498[1]	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

[1]Exact significance is displayed for this test.

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*Nonparametric Tests: Independent Samples.
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Nonparametric Tests

Notes

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	Elapsed Time	00:00:00.07

null : null

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of ENJYSUM is the same across categories of Creating.	Independent-Samples Mann-Whitney U Test	.697[1]	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

[1]Exact significance is displayed for this test.

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*Nonparametric Tests: Independent Samples.
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Nonparametric Tests

Notes

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Syntax		NPTESTS
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null : null

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of FLOWSUM is the same across categories of Perspective.	Independent-Samples Mann-Whitney U Test	.822[1]	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

[1]Exact significance is displayed for this test.

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*Nonparametric Tests: Independent Samples.
NPTESTS
  /INDEPENDENT TEST (ACTSUM) GROUP (Perspective)
  /MISSING SCOPE=ANALYSIS USERMISSING=EXCLUDE
  /CRITERIA ALPHA=0.05  CILEVEL=95.
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Nonparametric Tests

Notes

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Syntax		NPTESTS
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		(ACTSUM) GROUP
		(Perspective)
		/MISSING
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		USERMISSING=EXCLUDE
		/CRITERIA ALPHA=0.05
		CILEVEL=95.
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	Elapsed Time	00:00:00.07

null : null

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of ACTSUM is the same across categories of Perspective.	Independent-Samples Mann-Whitney U Test	.525[1]	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

[1] Exact significance is displayed for this test.

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*Nonparametric Tests: Independent Samples.
NPTESTS
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  /CRITERIA ALPHA=0.05  CILEVEL=95.
```

Nonparametric Tests

Notes

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	N of Rows in Working Data File	39

Syntax		NPTESTS /INDEPENDENT TEST (CHALSUM) GROUP (Perspective) /MISSING SCOPE=ANALYSIS USERMISSING=EXCLUDE /CRITERIA ALPHA=0.05 CILEVEL=95.
Resources	Processor Time	00:00:00.09
	Elapsed Time	00:00:00.07

null : null

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of CHALSUM is the same across categories of Perspective.	Independent-Samples Mann-Whitney U Test	.552[1]	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

[1]Exact significance is displayed for this test.

null : null

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of CONCSUM is the same across categories of Perspective.	Independent-Samples Mann-Whitney U Test	.822[1]	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

[1]Exact significance is displayed for this test.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of CONTSUM is the same across categories of Perspective.	Independent-Samples Mann-Whitney U Test	.728[1]	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

[1]Exact significance is displayed for this test.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of FDBKSUM is the same across categories of Perspective.	Independent-Samples Mann-Whitney U Test	1.000[1]	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

[1]Exact significance is displayed for this test.

null : null

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of GOALSUM is the same across categories of Perspective.	Independent-Samples Mann-Whitney U Test	.951[1]	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

[1]Exact significance is displayed for this test.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of LOSSSUM is the same across categories of Perspective.	Independent-Samples Mann-Whitney U Test	.377[1]	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

[1]Exact significance is displayed for this test.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of TRANSUM is the same across categories of Perspective.	Independent-Samples Mann-Whitney U Test	.697[1]	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

[1]Exact significance is displayed for this test.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of ENJYSUM is the same across categories of Perspective.	Independent-Samples Mann-Whitney U Test	.886[1]	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

[1]Exact significance is displayed for this test.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of FLOWSUM is the same across categories of Collaborative.	Independent-Samples Mann-Whitney U Test	.181[1]	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

[1]Exact significance is displayed for this test.

Appendix M - Semi-Structured Interview Question Guide

The following questions will guide the conversation for the semi-structured interview and will be adapted according to members from each condition.

1. What part of the study sticks out the most to you?
2. Describe how you felt during while writing your personal account.
3. Did you feel like you got your point across to the other group?
4. Do you feel like your perspective was understood by the other group?
5. Do you feel like you understood the perspective of the other group?
6. How did you feel toward the other group while writing your account?
7. How did you feel toward the other group while creating?
8. How did you feel toward the other group after reading their perspective?
9. Do you think choosing your own medium was helpful…why?
10. How do you feel toward the other group now?
11. What do you think caused a change in your feelings toward the other group?
12. Describe how you felt about the creating process.
13. Describe your experience while creating.
14. Is there any particular part of the creating process that stood out to you?
15. Can you describe any emotions you may have experienced while creating?
16. Are you happy with the final product?

Example Semi-structured interview with deduced themes

VOICE FILE NAME: Albert's Interview
Condition 1: Creating under the topic of Immigration
Group 1
<u>Key:</u>
Interviewer – I
Respondent - R

Interview	Notes	Themes
I: Okay so from what you can remember, is there a part of the experience that you think stuck out the most to you? R: Am I ignoring the first time I came in? **I: Yes.** R: Okay. Was there a bit that stuck out the most to me? Well, I mean first of all I went into this room with the guy whose name I can't remember and I think we had answered the same thing. We had given the same answer and we just wrote some things down but the bit that I remember more, is going into the other room and talking about…first of all, we had a chat with the other guys and then we did some creative stuff. So I did a haiku and I did…what is the question? What bit sticks out the most? I suppose doing my haiku. To be honest, I can't remember what I wrote	Tried to include everyone's opinions into his contribution	Sense of responsibility for others

now but I suppose the bit I remember is trying to find a way to work everyone else's opinions into…summarise the discussion in the haiku.		
I: Yes, okay.		
R: That's the bit that I remember.		
I: The bit you remember the most. Okay. Okay, like you said before do you remember the bit where you just went in and you were with him and you were both kind of writing down together why you had that opinion?		
R: Now you have reminded me. Yes. Now I remember what I wrote down.	Not wanting to disagree but still being honest	Initial negative feelings/tension
I: Yes. Do you remember how you felt as you were writing down your own personal opinion, at that time?		
R: I suppose there is an aspect of not wanting to disagree with people and I already knew that...you had already told me that he and I gave the same answers.	Wanting to avoid disagreement	Avoidance of disagreement/initial tension
I: Yes.		
R: But even then, I would say the thought still occurs that you don't want to…it's kind of you don't want to disagree	Nice to discuss with someone who shared the same view.	Positive feelings toward the in-group

with what the other person is saying. But in spite of that, I will still able to express myself honestly.		
I: **Good.**		
R: But I think more generally speaking, if that guy had been someone who would disagree with me, I think I probably would have been able to be honest but it's nice to you know, I think we kind of want to avoid that situation of having a disagreement with someone. At least I know I do.	Chose a medium that he was comfortable with – haiku – spoke more to his personality	Elements of Flow – sense of control
I: **So you would say it was nice then to kind of have a chat with someone who you know had the same answers as you?**	Thought he would shift responsibility to the others but his chosen medium made the task less intimidating.	Sense of responsibility/Elements of Flow
R: Yeah it was good. I suppose it was nice that we did yeah.		
I: **Okay. So then you all came together in the same group and I told you okay, now you all have to create something together on the topic of immigration. When I said that, was that…did that feel like it was going to be challenging? How did you feel first hearing that?**		
R: Oh yeah. I didn't know what the hell we were going to do. It		Need to express

was…I don't consider myself to be a creative person at all. <mark>I am not artistic. I certainly can't draw, which is why I chose haiku because it's so structured</mark>. I find that less horrifying. So yeah when you said that I thought I don't know what I am going to do<mark>, I might just sort of be quiet and leave it up to everyone else but I found because I had already chosen haiku as my medium and it was a structured thing that I felt quite comfortable with, I was then able to use that.</mark>	Wanting to express – get their perspectives out in the open	
		Need to express
	Need to explain their positions.	Assumptions of the other group
I: Yeah to do the task essentially. So obviously one of the things I observed anyway, was that even though I said okay just draw something under the topic of immigration, what ended up happening was that everyone started sort of…gave each other the opportunity to describe their own perspective essentially.	Speculation about the other group. Believes they would be more keen to explain their side as it may be perceived as the less popular view	Need to express
R: Yeah so like, we had a chat first.	Believes the chat was necessary to clear up any misconceptions	Unity/Creating as the facilitator of the merging
I: Yeah. You did have a chat about each other's perspective, even without me giving that instruction. Why do you think that happened before the creative process? Where do you think that was coming from?	Creating together facilitated the merging of two groups into one group	Unity/Togetherness/Merging

R: I think we all wanted to get it off our chests. I think there was a potential disagreement I think you said; something like two of us answered…it was about cultures wasn't it? It was are some cultures better than others? **I: And I think you guys said equal and the other group said some cultures are better than others, yeah.** R: And I think we wanted to get that off our chests and make sure we were all…you know, we are not necessarily in a disagreement with each other but to explain our positions. I suspect that the others would have been keener to explain their position because they have potentially said something quite controversial there by saying some cultures are worse somehow. That might be controversial and I suspect that they would be quite eager to get that…explain themselves. And I was happy to hear that 'cause I didn't...you know, I didn't expect them to have very extreme views. I suspected it was an issue either of definitions or perspectives, rather than them holding some kind of extreme view but it was good to have that explanation. I think we	Shift from two groups to one group. Identifying as a part of one group. Believes that creating facilitated the merging of groups Believes the conversation would have still happened regardless of the task or not. The art that was created ended up being based on the conversation	Unity/Togetherness facilitated by creating together Need to express Art as expression/representation of perspectives

needed to have that chat as a group.		Assumptions of the other group
I: So do you think that the art, or do you think that the instruction to create together facilitated that conversation?		
R: I am not sure about that. I think the task probably facilitated or kind of merging together as one big group, rather than two pairs. There were four of us weren't there?	Did not feel very negative because he already knew the members of the other group and assumed their perspectives couldn't be very different. Assumptions of the other group.	
I: Yes, yes.		
R: When we entered the room we were two pairs. When we left the room, we were a group of four.		Change in feelings/atmosphere (positive)
I: Yes.		
R: That made…I suspect that might have been down to, at least in part, down to the task rather than just the conversation. But I am not sure about the relationship between the task and the initial conversation that we had and whether or not those two things affected each other. I think if you had just shoved us in that room and left us on our own, we would have still had that conversation.	More relaxed – no more disagreement- came in as two groups left as one group	Change in feelings/atmosphere
I: Okay, yeah. The interesting thing that I found was that you all		

sort of created a work of art that encapsulated each other's perspective based on the question. So you know, the instruction wasn't create something based on the question, it was under the topic of immigration but somehow you had a conversation and you managed to somehow encapsulate everyone's perspective in that drawing.	Couldn't pin-point why it felt different	
R: Yeah, so the piece of work that we ended up with was kind of based more on the conversation that we had had. Very much based on the conversation that we had, rather than whatever it was you told us to make. So we kind of did the wrong thing.		Sense of responsibility
I: Well it was still on the immigration. It was still under the topic of immigration but more so directed to the point of disagreement than to kind of flesh it.		Elements of Flow – focus
R: Yeah it was, yeah.	Group responsibility – trying to summarize/express through his medium the views of the others.	
I: So do you think…I will ask before you merged as a group, before I brought you both together, did you feel any negative feelings toward the opposing group?	Flow – focus	
R: No I don't think so and I already		

341

knew…no it was Andrea wasn't it, so no not really. I mean I already knew them and that was probably a large reason why I didn't expect them to have vastly different opinions to me. 'Cause I already knew them, maybe if they had been complete strangers I would have been more apprehensive of that. I don't know if that's a very helpful answer for your study? **I: Yeah of course. Yeah. So do you think at the end of the session…did you feel a difference with the other group. Like did you…was there a shift in the atmosphere, a shift in the feeling that you may have observed or felt at the end of the session?** R: I think we were more relaxed at the end of the session. A because we had done the task and there was no more difficulty with trying to imagine what we were going to do and we had got over any kind of potential disagreement between the two groups of two and like I said, we went in as two pairs but we came out as a group of four. **I: Yeah.** R: Whether that's down to the conversation	Happy with the final edit	

or the task or a combination of both, it's up to you to figure out but.		
I: **Yeah.**		
R: <mark>Probably a little bit of both. But yeah sure, it did feel different but I couldn't pin point exactly why it felt different on the way out probably because of a number of things, the fact that we had a chat, the fact that the session was over.</mark>		
I: **Yeah, yeah. Okay good. And while you were creating specifically, so while you were writing down your haiku trying to include everybody else in there, can you remember how you were feeling as you were focused on that task? Were you focused and were there any emotions going on at all as you were?**		Need to express
R: I wouldn't say I was overcome with emotion especially just trying to make something. Just trying to follow the rules of the haiku and the idea of the haiku was to…I think I was trying to work…the guy whose name I have forgotten, who took photographs, I think I did the haiku. The three lines of the haiku, one on my…something I said, something on what Smith said and something on what Andrew had said	Reasons for conversation – feeling labelled – wanting to clear the air	Need to express

Reasons for expressing/Need to express |

and then the guy with the camera was going to take photos and that was going to be something different. So I was trying to summarise what those three people had said. And so it was really formulaic, I just did a line on Andrew, a line on Dodgson, a line on me. **I: Would you say you were focused as you were doing it?** R: Yeah, yeah. **I: Okay. And at the end of the session, were you happy with the final product? Were you happy with what you had come up with?** R: Yeah. Yeah it was pretty good. I don't think I actually saw the final thing, so I wouldn't mind seeing that. It's whether you have actually got it. **I: Yeah.** R: It was…Andrew did that picture. Xxxx did a picture as well. **I: Yes.** R: And there was… **I: Your haiku was on Dodgson's picture.** R: Right. **I: And then the other guy took the digital images.**	Need to express Not sure if the artistic task makes a difference to just being thrown in a room together.	

R: Yeah, yeah. Ah that's it and he took pictures of us doing it. And they went in as well. Yeah. **I: Yes.** R: What was the question? **I: if you were happy with it or not?** R: <mark>I think I was really happy</mark> but I didn't actually get to see the final cut. The final version but I think it was about as good as it could have been. **I: Good. So again, just one more question. Back to talking about the conversation and the task, so do you think if you were given…or shall I say, do you think that the artwork…I think initially I asked you if you think the artwork may have facilitated that conversation. So do you think if you were given another task to do, something like a group collaborative task, where you just had to maybe use some tools and build something together.** R: The same group? **I: Yeah. Do you think you would have still talked about what**		

you had to talk about? If you just had to go in and I said okay, put this together with these tools. R: If there had been no preliminary questions and you hadn't put us in groups or anything? **I: Yes. The same format but once you come together, the instruction is okay, here are some tools put this together. Build this together then. Do you think?** R: We would have had the same conversation? Yeah I do. **I: You do?** R: Yeah. **I: Okay.** R: Sorry. **I: That's okay. So what do you think pushes for that conversation to happen then? What do you think is the reason for wanting to talk that out?** R: I think we possibly felt labelled. There is an issue of labelling here because we had answered that questionnaire in a certain way and you like, declared these two people to be…pro. We are the yes people and the no	346	

people. You put us into two groups there and there is a potential in group out effects going on and I think the first thing we wanted to do was clear the air.

I: Yeah.

R: On that. And I doubt the fact that it was going to be a creative task…maybe I don't know. I am guessing. I am guessing we would have had that conversation but you had thrown us in a room and said nothing, given us a spaghetti tower to make or told us to write a poem or something.

I: Yeah, okay. Brilliant. That should do it.

R: Okay.

[End of transcript]

347

Appendix O: Full List of Codes and Sub -Themes for Thematic Analysis

Aaron	Albert	Daniel	Greg	Katrina	Lisa	Michael	Nadia
Felt under pressure after being separated	Tried to include everyone's opinions into his contribution	Enjoyment of in-group formation. Easy to talk to some one with the same views.	Found it interesting how different opinions could change them.	Felt under pressure after being separated	Out-group feelings, out group presumptions. Felt set against them from the beginning.	Confused throughout the exercise – couldn't make the connection	Interested in other people's opinions
Straight away wanted the others to know why he held that viewpoint	Not wanting to disagree but still being honest	Skepticism. Initial negative feelings/apprehension	Comfortable and easy talking to someone with the same opinion.	Straight away wanted the others to know why he held that viewpoint		Concerned about what the other group thought about him. They might think he's racist	Initially – instantly felt angry toward the other group
	Wanting to avoid disagreement				Initial feelings – negative feelings – due to lack of understanding of the other's perspective.		Evidence of Flow – lost track of time, forgot about everything.
Important that others knew what he meant – being politically correct		Apprehension/Skepticism due to possibility of an argument	Initial negative feelings due to difference of opinion.	Important that others knew what he meant – being politically correct		Didn't *feel* a conflict toward the other group.	
Got his viewpoint across	Nice to discuss with someone who shared the same view.	Description of the opposite group. The *other*. Highlighting the differences of the other group		Got his viewpoint across			Change of feelings at the end of the activity
Very interested in the task because of his own personal experiences. Examples of Flow – focused, interested	Chose a medium that he was comfortable with – haiku – spoke more to his personality	Not surprised at the content in the exchange of information	Initially thought it would not work. That they wouldn't be able to create anything.	Very interested in the task because of his own personal experiences. Examples of Flow – focused, interested	Felt good to even explore her own personal reasons for her perspective rather than really on something that may just be engrained in her	Thought the other group had a very *linear* or *taught* way of thinking. Assumptions about the other groups	The change to a more peaceful state was caused by a part that *wasn't in the study*
	Thought he would shift responsibility to the others but his chosen medium made the task less intimidating.	Description of the other. Frustration and negative feelings toward the other. Didn't feel like his voice were	As he was drawing, he was trying to capture not just his own opinion but everyone else's opinion. Felt good seeing everyone's opinion come together.	Past experiences have taught him not to pre-judge. Still firmly holds the same perspective – personal experiences and	Discussing with in-group member solidified her views. Set her more against the opposing team as she felt even more strongly about her own views.	Though they shared the same answer, they had the same answer for different reasons. Wondered how the activity would come together	Initially found the other's perspective to be narrow-minded – but after speaking to them discovered she

348

		heard initially.		examples of why			understands and even agrees.
Past experiences have taught him not to pre-judge.	Wanting to express – get their perspectives out in the open	DIdn't feel like he was heard. Made a big effort to follow instructions and fulfil the other's perspective.	Felt like he had to focus so as not to look like an idiot	Understood their perspective but still firmly holds his own view.	Negative views of the other - Still thinking of them as bad people against they're opinions.	Thought the activity was interesting	One group approaches the other to understand the difference in perspectives – why don't they agree?
Still firmly holds the same perspective – personal experiences and examples	Need to explain their positions.	Explaining the other's perspective. Tried to express the other's point of view through drawing.	Felt like he has to focus as the art was not just about him but about everyone else. Sense of responsibility.	Discussing his perspective.	Even after/whilst reading the opposite perspective – still felt against the other group.	Communication instantly made him feel different. Not better or worse but more able to make a judgement.	
	Speculation about the other group. Believes they would be more keen to explain their side as it may be perceived as the less popular view			Wanted a discussion to talk about different viewpoints		Believes that no matter what the activity, he would have felt differently	Reading from another's perspective may not be very effective. Important to know what was meant, tone of voice, what they know etc. (Contact theory)
Understood their perspective but still firmly holds his own view.		Focused and engaged on the task of creating. Elements of Flow.	Felt good capturing everybody's opinion. Everybody understood everybody.	Assumptions of the other group. People may have misjudged him based on his answers	Negative feelings toward the other group. Initial sense of awkwardness		
Discussing his perspective.	Believes the chat was necessary to clear up any misconceptions	Group decisions. One person became the artist for everyone.	People wanted to understand the other's perspective.	Engaged in the process – elements of Flow	Exploring each others' views just showed a different perspective on the same thing.	Neither bad or good, just a gathering of information about the other.	
Wanted a discussion to talk about different viewpoints	Creating together facilitated the merging of two groups into one group	Artwork represented what everyone was saying. Aspects from everyone's view included.	Wasn't an argument after a while but rather an interesting discussion.	Comparison of males and females	Understanding the others' viewpoint	Thought he would be able to sit and discuss why they thought what they thought	Felt *equal* after discussing perspectives
			During the discussion found out they were probably on the same page but from	Would have appreciated a group discussion			Felt a lot better being able to discuss after the fact.
Assumptions of the other group.	Shift from two groups to	Artwork representati		Pressure rather than animosity being the lone	Agreed on how to express each	Felt the need to talk about it	

People may have misjudged him based on his answers	one group. Identifying as a part of one group.	on – the movement of immigration	different angles.	individual toward the opposing group	other's views through the artwork.		
	Believes that creating facilitated the merging of groups		Feelings changed		The awkwardness disappeared	Wanted a discussion afterward to understand why both groups felt the way they did.	Initial negative feelings – didn't like them.
							In-group feelings – felt really close to her group member.
	Believes the conversation would have still happened regardless of the task or not.	Drawing was an agreement of what everyone said – collective work rather than one trying to show the other.	The collaborative work facilitated friendliness and comfort with each other.		Discovered that the core valued were the same		Forgot about her "negative" feelings during the exercise.
					Similar in their views	Wondering what the "other" though of him because of his answer.	Concluded that even if you disagree – don't speak about it, help each other and it's ok.
Engaged in the process – elements of Flow			The creating process facilitated him learning more about photography, Japanese art…everyone's input allowed eventually created one final artpiece.		Appreciated the art exercise as they got to know each other more personally		
						Didn't want to get into *a big ordeal.*	
	The art that was created ended up being based on	Felt he could have pushed harder for					

	the conversation	his perspective			Creating facilitated understanding of perspectives		
		Could maybe include more from his perspective			Description of the artwork		Appreciated the mutual respect that was shown throughout the activity.
					Good to have everyone's perspectives represented	Different choices would have been made on an individual level.	
	Did not feel very negative because he already knew the members of the other group and assumed their perspectives couldn't be very different. Assumptions of the other group.	Time potentially a reason for not being able to completely represent his perspective. More time – more perspective			Happy with the end result	Happy with the team effort – appreciated and understands decisions have to be made as a team.	Most meaningful part – they all respected each other.
Comparison of males and females		"we" were happy with the final result. Use of "we" rather than us vs. them.			Getting to know them on a more personal level makes a difference	Wanted to have more of a discussion about it.	

		Another reason – potentially the "voice" chosen to create on behalf of everyone.				
				Being friends doesn't mean agreeing on everything		Her expectations probably prompted the reasoning behind the need to speak after the fact.
	More relaxed – no more disagreement- came in as two groups left as one group	Control given to the other group because the one chosen to create was from the other group.				
Would have appreciated a group discussion				She began to feel nicer toward them.		
		Observation of different creativity process. Wordy vs. less wordy.				
Pressure rather than animosity being the lone individual toward the opposing group	Couldn't pin-point why it felt different					
	Group responsibility – trying to summarize/express through his medium the views of the others.			Art facilitated the conversation		
Would have wanted to explain why he had that						

352

viewpoint							
	Flow – focus						
							Importance of face to face conversation – being able to discuss perspectives
		Struggle initially to get the points across. Metaphorical vs. straightforward.			The beauty of art – allows what cannot be said to still be expressed		
	Happy with the final edit	Everyone felt good at the end as they were leaving. Use of "we" versus "us" and "them". Felt like they accomplished something meaningful.			Elements of flow – loss of time, desired to make something nice		
	Reasons for conversation – feeling labelled – wanting to clear the air						
	Not sure if the artistic task makes a difference to just being thrown in a room together.				Relaxed environment while creating		Importance of treating people as she wants to be treated.
		Representation of a bond. All walked down the hall together.			Everyone was supporting each other through the art		

Position: Some cultures are better than others vs. all cultures are equal
Chosen media: 2 participants chose drawing with pen and paper, one chose photography and the fourth chose a haiku.
The images below show the separate images of participants during the process of creating. The final image is the final combined image and collaborative work of art created by participants. Faces of participants were blocked out for anonymity purposes.

Image 4

Image 5

Image 6

Beliefs, Practices, People, ideology
differences, similarities, Perspectives
Immigration, emegration, migration - net migration

who is the migrant?
1   2   3   4 5
views, detail, on, Perspective
,   2 3   4   5 6 7
cultures can coalesce
1 2   3   4 5
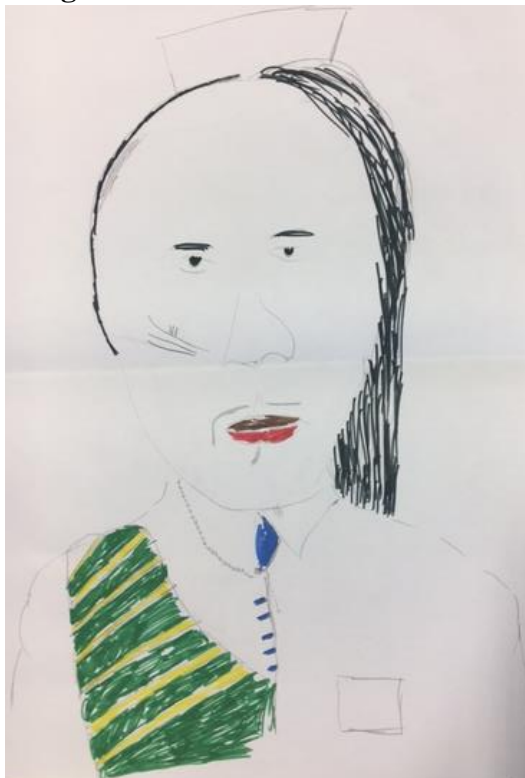
Image 7

Image 8: Final Collective Piece

CALL FOR SALFORD UNIVERSITY STUDENTS TO PARTICIPATE IN STUDY!

TITLE: FACILITATING EXPERIENCES OF ART IN INDIVIDUAL VS. GROUP SETTINGS

We are recruiting students to participate in a study to investigate the experience of collaborative creating of artwork compared to individual creating and any potential relationship with stress!

This study affords a great opportunity to not only express yourself but also to explore your own personal creativity!

Refreshments will be provided for all participants!!

If you're interested, have any questions or would like more information, please contact the researcher who will provide more information about the study.

Researcher: Hailee Ingleton   Email: h.ingleton@edu.salford.ac.uk
Supervisor: Rod Dubrow-Marshall   Email: R. Dubrow-Marshall@salford.ac.uk

Study Title
Facilitating experiences of art in Individual versus Group Settings

Invitation paragraph
I would like to invite you to take part in a research study. Before you decide you need to understand why the research is being done and what it would involve for you. Please take time to read the following information carefully. Ask questions if anything you read is not clear or you would like more information. Take time to decide whether or not to take part. You are given a minimum of 24 hours to decide your involvement in this research project.

What is the purpose of the study?
The purpose of the study is to investigate the facilitation of art during collaborative creating of art as compared to the creating of art individually.

Why have I been invited?
You have been invited to take part as you are a student studying at University of Salford.

Do I have to take part?
Taking part in the research is entirely voluntary. It is up to you to decide. Declining to participate will have no consequence for you whatsoever. If you do decide to take part you will be asked to complete a consent form to show you agree to take part but you are free to withdraw at any time, without giving a reason. If you do decide to withdraw, all your data will be destroyed if you withdraw within one month of completing the research procedure and there will be no need to take any further part in the study.

What will happen to me if I take part?
Upon showing interest, you will be asked to choose a medium with which to create. You may choose any medium as long as you or myself can provide it. Upon arriving on the agreed upon date, you will be given a demographic questionnaire to be filled out. Once this is completed you will be given two questionnaires to complete. Following this, you will be asked to create a work of art collaboratively in a group or individually, depending on which condition you are randomly placed.

The above exercise will be audio and visual recorded. At the end of the exercise you will be administered the questionnaires once again. The entire exercise is expected to last approximately 1.5 hours.

You will then be asked to discuss in a focus group your experience creating in the condition that you were placed.

What are the possible disadvantages and risks of taking part?
Participants may not feel comfortable talking in a group setting or sharing their experience. Participants are reminded that all conversation is kept confidential and all views are welcome to be expressed. If at all the exercise makes you uncomfortable, you

are free to withdraw at any time during the research procedure and after completing the procedure can request the withdrawal of their data for up to one month without giving any reason. If you would like further support, please see information for the school's Wellbeing and Counselling Service below.

What are the possible benefits of taking part?

We cannot promise the study will help you personally but the information we get from the study will help to create an understanding of the experience of Flow while collaboratively creating. The results from the study will be carefully analysed and the data may also be published for the benefit of the academic community.

Will my taking part in the study be kept confidential?

Your data will be confidential and any recording that identifies you will be stored carefully with only the researcher having access. You will also be given a unique participant ID should you wish to withdraw any of your data after the study has been completed. Data will be stored for up to 5 years, after which it will be destroyed.

What will happen if there is a problem?

If you have any queries or questions please contact:

Principal investigator: XXXXX

School of Health Sciences & Society

Address: XXXXX

Tel: XXXXX

Email: XXXXX

If you remain dissatisfied you can contact:

Dr Susan McAndrew

School of Nursing, Midwifery, Social Work & Social Sciences

Phone No:52778

Email Address:s.mcandrew@salford.ac.uk

Building Location: Mary Seacole

Room Number: MS1.91

Support

If after participating you feel upset, disadvantaged or uncomfortable, support and advice are available from the University's Wellbeing and Counselling Service. To book a session call 0161 295 0023 or book online using Salford Advantage.

If after participating in the study you have any concerns regarding your own academic work, support and advice are available from the University's Student Life (http://www.advice.salford.ac.uk Email: advice@salford.ac.uk Tel: 0161 295 0023). Alternatively you may wish to discuss any concerns with your programme leader or personal tutor. I can also be contacted using the contact details provided below.

Contact details: For further information or questions about the study please email the researcher.

State Pre-Questionnaire

Please indicate how well each word describes how you feel *At The Moment*.

Not at all = 1   A little bit = 2   Somewhat = 3   Very much = 4   Extremely = 5

1. Dissatisfied	1	2	3	4	5
2. Alert	1	2	3	4	5
3. Depressed	1	2	3	4	5
4. Sad	1	2	3	4	5
5. Active	1	2	3	4	5
6. Impatient	1	2	3	4	5
7. Annoyed	1	2	3	4	5
8. Angry	1	2	3	4	5
9. Irritated	1	2	3	4	5
10. Grouchy	1	2	3	4	5

Please indicate how true each statement is of your thoughts *During The Past Ten Minutes*.

Not at all = 1   A little bit = 2   Somewhat = 3   Very much = 4   Extremely = 5

11. I am committed to attaining my performance goals	1	2	3	4	5
12. I want to succeed on the task	1	2	3	4	5
13. I am motivated to do the task	1	2	3	4	5
14. I'm trying to figure myself out	1	2	3	4	5
15. I'm reflecting about myself.	1	2	3	4	5
16. I'm daydreaming about myself.	1	2	3	4	5
17. I feel confident about my abilities.	1	2	3	4	5
18. I feel self-conscious.	1	2	3	4	5
19. I am worried about what other people think of me.	1	2	3	4	5
20. I feel concerned about the impression I am making.	1	2	3	4	5
21. I expect to perform proficiently on this task.	1	2	3	4	5
22. Generally, I feel in control of things.	1	2	3	4	5
23. I thought about how others have done on this task.	1	2	3	4	5
24. I thought about how I would feel if I were told how I performed.	1	2	3	4	5

State Post-Questionnaire

Please indicate how well each word describes how you felt *During The Task*.

Not at all = 1   A little bit = 2   Somewhat = 3   Very much = 4   Extremely = 5

1. Dissatisfied	1	2	3	4	5
2. Alert	1	2	3	4	5
3. Depressed	1	2	3	4	5
4. Sad	1	2	3	4	5
5. Active	1	2	3	4	5
6. Impatient	1	2	3	4	5
7. Annoyed	1	2	3	4	5
8. Angry	1	2	3	4	5
9. Irritated	1	2	3	4	5
10. Grouchy	1	2	3	4	5

Please indicate how true each statement was of your thoughts *While Performing The Task*.

Not at all = 1   A little bit = 2   Somewhat = 3   Very much = 4   Extremely = 5

11. I was committed to attaining my performance goals	1	2	3	4	5
12. I wanted to succeed on the task	1	2	3	4	5
13. I was motivated to do the task	1	2	3	4	5
14. I tried to figure myself out.	1	2	3	4	5
15. I reflected about myself.	1	2	3	4	5
16. I daydreamed about myself.	1	2	3	4	5
17. I felt confident about my abilities.	1	2	3	4	5
18. I felt self-conscious.	1	2	3	4	5
19. I was worried about what other people think of me.	1	2	3	4	5
20. I felt concerned about the impression I was making.	1	2	3	4	5
21. I performed proficiently on this task.	1	2	3	4	5
22. Generally, I felt in control of things.	1	2	3	4	5
23. I thought about how others have done on this task.	1	2	3	4	5
24. I thought about how I would feel if I were told how I performed.	1	2	3	4	5

Instructions: Please provide a response for each of the following questions:

1. What is your age? _____

2. What is your sex?

Female ○   Male ○

3. What is your marital status?

Single ○   Married ○   Separated ○   Divorced ○   Widowed ○

4. Which school do you belong to?

School of Arts and Media ○   School of the Built Environment ○   School of Computing, Science and Engineering ○   School of Environment and Life Sciences ○ School of Health and Society ○   Salford Business School ○

5. What subject are you pursuing a degree in?

_____

6. Are you a home student or an international student?

_____

7. What is your current year of study?

_____

Table detailing the Shapiro Wilks scores of Flow constructs before and after creating

Condition Before and after Creating	Shapiro Wilks Statistical Result
Flow Before Creating	W (23) = 0.94, p= 0.17
Flow After Creating	W (23) = 0.95, p = 0.30
Challenge – Skill Balance Before (CHAL)	W (23) = 0.97, p = 0.67
Challenge – Skill Balance After (CHAL)	W (23) = 0.95, p = 0.29
Action- Awareness Merging Before (ACT)	W (23) = 0.92, p = 0.07
Action-Awareness Merging After (ACT)	W (23) = 0.92, p = 0.06
Clear Goals Before (GOAL)	W (23) = 0.92, p = 0.06
Clear Goals After (GOAL)	W (23) = 0.91, p = 0.04
Unambiguous Feedback Before (FDBK)	W (23) = 0.95, p = 0.27
Unambiguous Feedback After (FDBK)	W (23) = 0.96, p = 0.47
Concentration on Task Before (CONC)	W (23) = 0.92, p = 0.06
Concentration on Task After (CONC)	W (23) = 0.85, p = 0.00
Paradox of Control Before (CONT)	W (23) = 0.88, p =.01
Paradox of Control After (CONT)	W (23) = 0.92, p = 0.07
Loss of Self-Conciousness Before (LOSS)	W (23) = 0.93, p = 0.12
Loss of Self-Conciousness After (LOSS)	W (23) = 0.85, p = 0.00

Transformation of Time Before (TRAN)	W (23) = 0.96, p = 0.47
Transformation of Time After (TRAN)	W (23) = 0.93, p = 0.10
Autotelic Experience (ENJY) Before	W (23) = 0.92, p = 0.80
Autotelic Experience (ENJY) After	W (23) = 0.93, p = 0.09

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
FlowbeforeSUM	23	62.2%	14	37.8%	37	100.0%
FlowafterSUM	23	62.2%	14	37.8%	37	100.0%

Descriptives

			Statistic	Std. Error
FlowbeforeSUM	Mean		126.2174	4.36205
	95% Confidence Interval for Mean	Lower Bound	117.1710	
		Upper Bound	135.2637	
	5% Trimmed Mean		126.9758	
	Median		130.0000	
	Variance		437.632	
	Std. Deviation		20.91967	
	Minimum		84.00	
	Maximum		154.00	
	Range		70.00	
	Interquartile Range		29.00	
	Skewness		-.492	.481
	Kurtosis		-.778	.935
FlowafterSUM	Mean		130.3043	5.47991
	95% Confidence Interval for Mean	Lower Bound	118.9397	
		Upper Bound	141.6690	
	5% Trimmed Mean		130.2488	
	Median		134.0000	
	Variance		690.676	
	Std. Deviation		26.28071	
	Minimum		86.00	
	Maximum		176.00	
	Range		90.00	
	Interquartile Range		45.00	
	Skewness		-.116	.481
	Kurtosis		-.633	.935

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
FlowbeforeSUM	.123	23	.200[*]	.939	23	.174
FlowafterSUM	.121	23	.200[*]	.951	23	.301

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

365
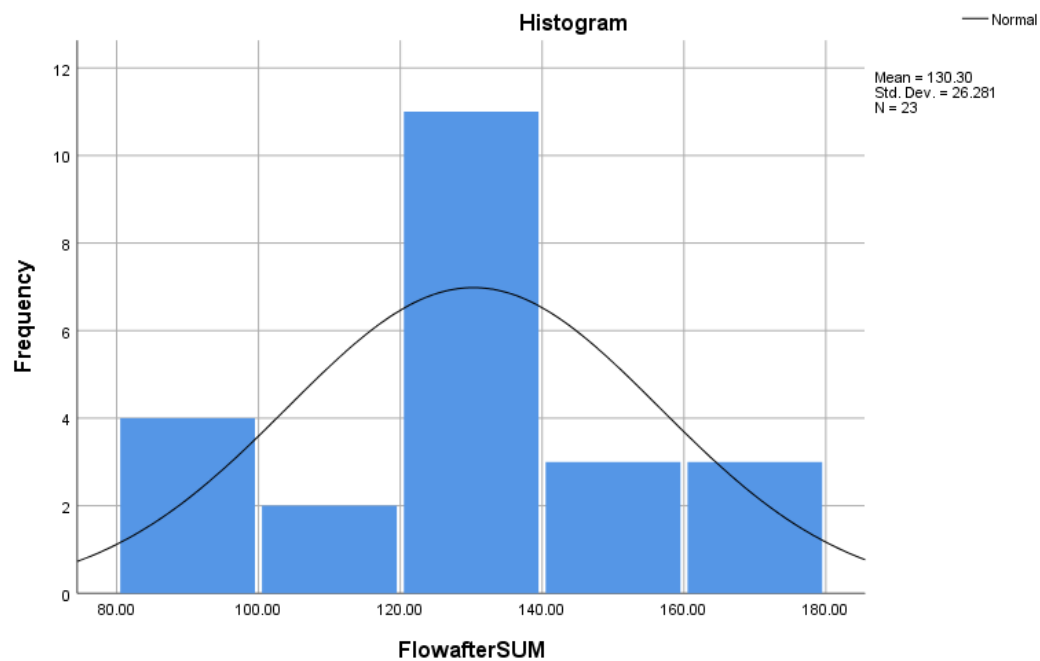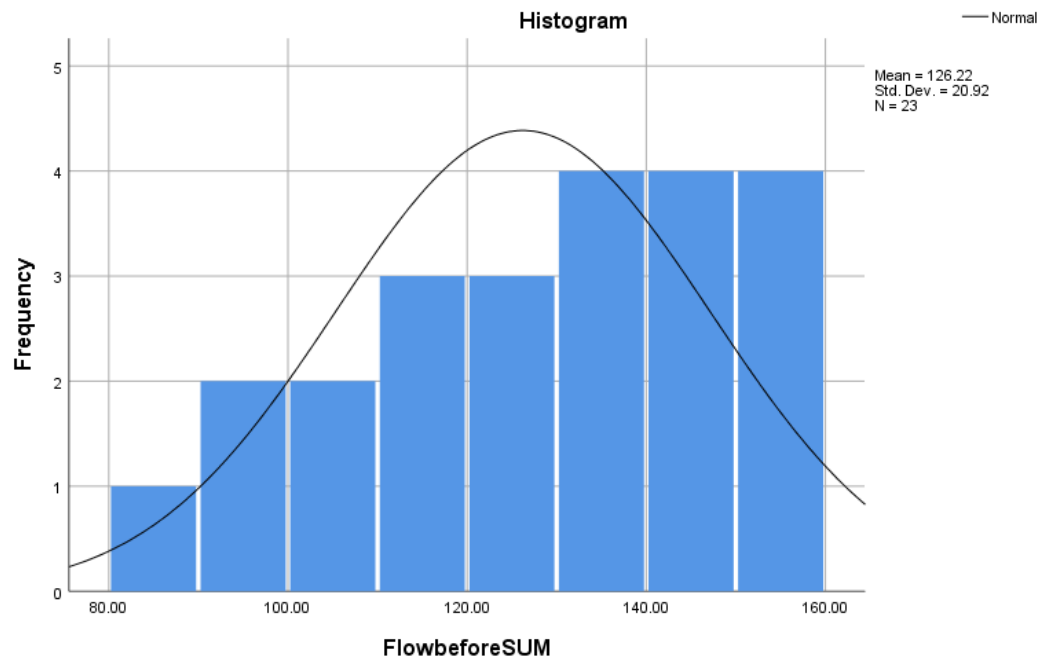
Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Chalbefore	23	62.2%	14	37.8%	37	100.0%
Chalafter	23	62.2%	14	37.8%	37	100.0%

Descriptives

			Statistic	Std. Error
Chalbefore	Mean		12.6957	.65165
	95% Confidence Interval for Mean	Lower Bound	11.3442	
		Upper Bound	14.0471	
	5% Trimmed Mean		12.6763	
	Median		13.0000	
	Variance		9.767	
	Std. Deviation		3.12519	
	Minimum		6.00	
	Maximum		20.00	
	Range		14.00	
	Interquartile Range		4.00	
	Skewness		-.052	.481
	Kurtosis		.510	.935
Chalafter	Mean		13.9565	.91643
	95% Confidence Interval for Mean	Lower Bound	12.0560	
		Upper Bound	15.8571	
	5% Trimmed Mean		14.1039	
	Median		14.0000	
	Variance		19.316	
	Std. Deviation		4.39502	
	Minimum		5.00	
	Maximum		20.00	
	Range		15.00	
	Interquartile Range		8.00	
	Skewness		-.390	.481
	Kurtosis		-.841	.935

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Chalbefore	.117	23	.200[*]	.969	23	.672
Chalafter	.126	23	.200[*]	.950	23	.293

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Chalbefore

Chalafter

Histogram

Mean = 13.96
Std. Dev. = 4.395
N = 23
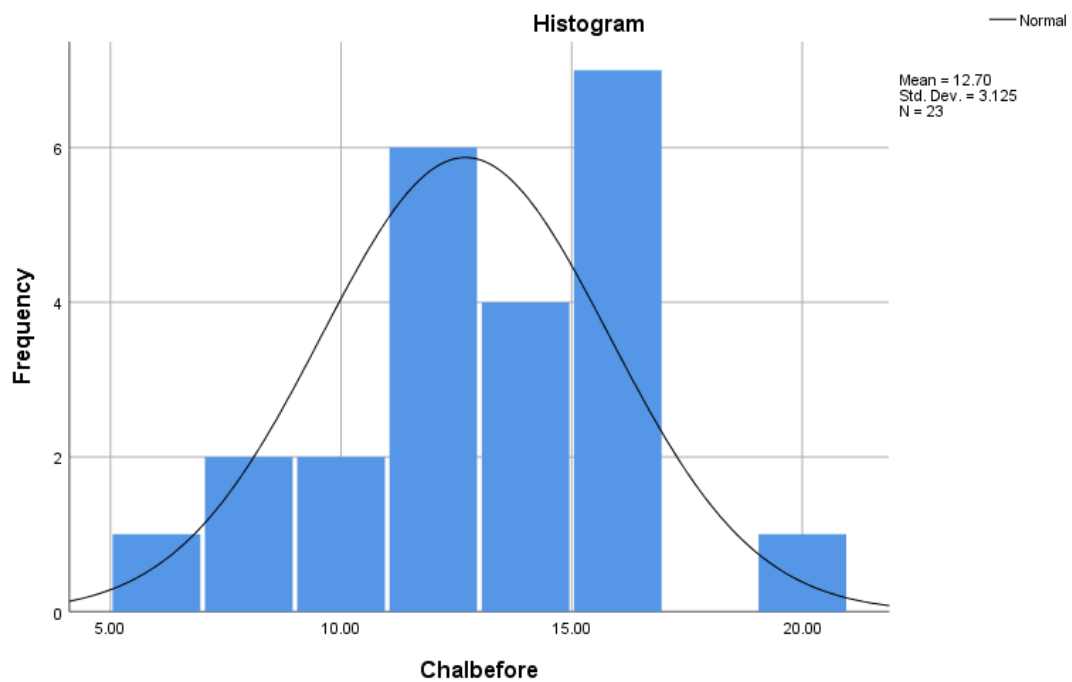
Chalafter
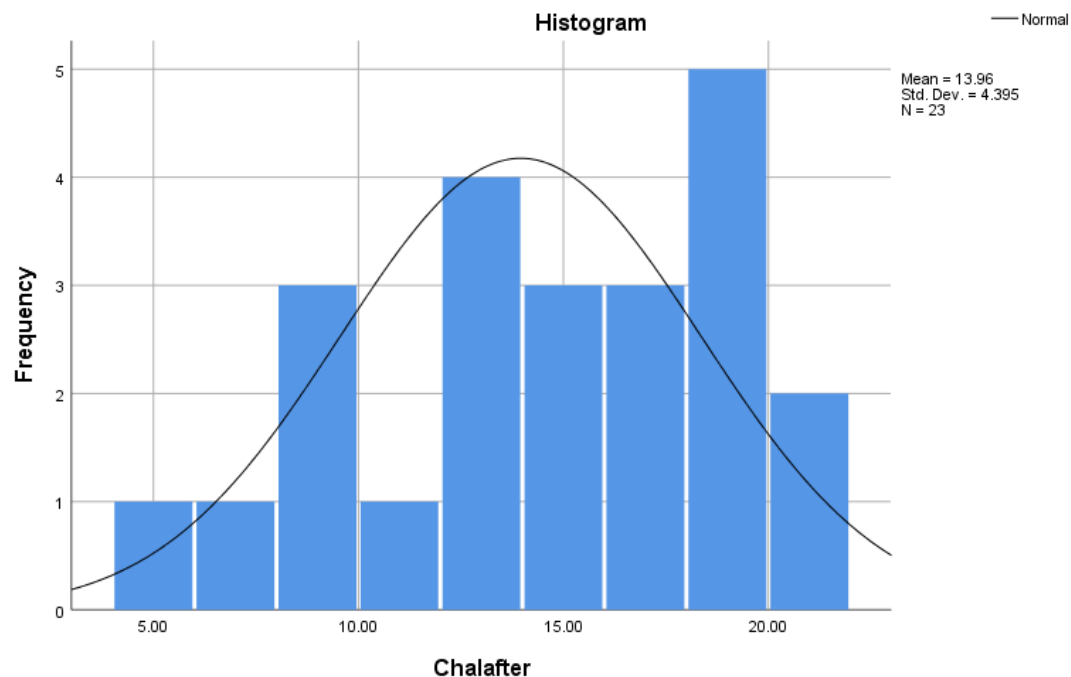
Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Actbefore	23	62.2%	14	37.8%	37	100.0%
Actafter	23	62.2%	14	37.8%	37	100.0%

Descriptives

			Statistic	Std. Error
Actbefore	Mean		15.1304	.78852
	95% Confidence Interval for Mean	Lower Bound	13.4952	
		Upper Bound	16.7657	
	5% Trimmed Mean		15.2560	
	Median		16.0000	
	Variance		14.300	
	Std. Deviation		3.78159	
	Minimum		8.00	
	Maximum		20.00	
	Range		12.00	
	Interquartile Range		6.00	
	Skewness		-.613	.481
	Kurtosis		-.640	.935

368

Actafter	Mean			14.0435	1.02243
	95% Confidence Interval for Mean	Lower Bound		11.9231	
		Upper Bound		16.1639	
	5% Trimmed Mean			14.2077	
	Median			14.0000	
	Variance			24.043	
	Std. Deviation			4.90341	
	Minimum			5.00	
	Maximum			20.00	
	Range			15.00	
	Interquartile Range			9.00	
	Skewness			-.366	.481
	Kurtosis			-1.028	.935

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Actbefore	.156	23	.152	.921	23	.070
Actafter	.133	23	.200[*]	.919	23	.064

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Actbefore
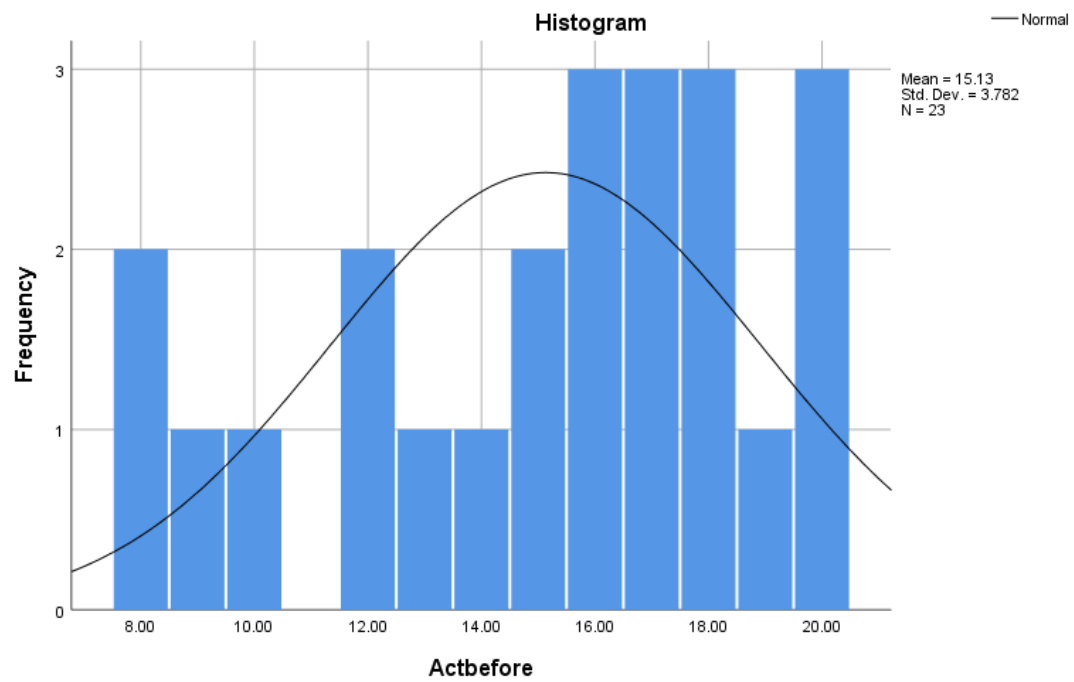
Histogram

Mean = 15.13
Std. Dev. = 3.782
N = 23

Actafter

Histogram

Mean = 14.04
Std. Dev. = 4.903
N = 23
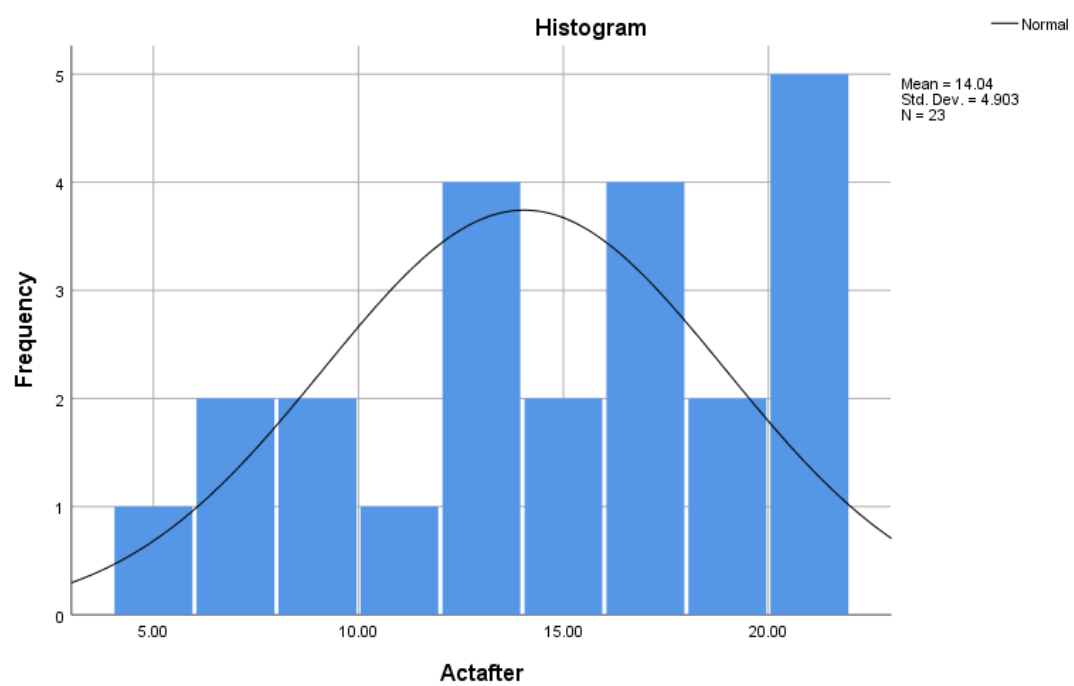
Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Goalbefore	23	62.2%	14	37.8%	37	100.0%
Goalafter	23	62.2%	14	37.8%	37	100.0%

Descriptives

			Statistic	Std. Error
Goalbefore	Mean		15.6957	.71802
	95% Confidence Interval for Mean	Lower Bound	14.2066	
		Upper Bound	17.1847	
	5% Trimmed Mean		15.8696	
	Median		17.0000	
	Variance		11.858	
	Std. Deviation		3.44350	
	Minimum		8.00	
	Maximum		20.00	
	Range		12.00	
	Interquartile Range		5.00	
	Skewness		-.712	.481
	Kurtosis		-.446	.935
Goalafter	Mean		13.5652	.94686
	95% Confidence Interval for Mean	Lower Bound	11.6015	
		Upper Bound	15.5289	
	5% Trimmed Mean		13.5725	
	Median		13.0000	
	Variance		20.621	
	Std. Deviation		4.54099	
	Minimum		7.00	
	Maximum		20.00	
	Range		13.00	
	Interquartile Range		7.00	
	Skewness		.113	.481
	Kurtosis		-1.282	.935

Tests of Normality

Kolmogorov-Smirnov[a]			Shapiro-Wilk		

	Statistic	df	Sig.	Statistic	df	Sig.
Goalbefore	.187	23	.035	.917	23	.059
Goalafter	.139	23	.200*	.911	23	.043

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Goalbefore

Histogram

Mean = 13.57
Std. Dev. = 4.541
N = 23
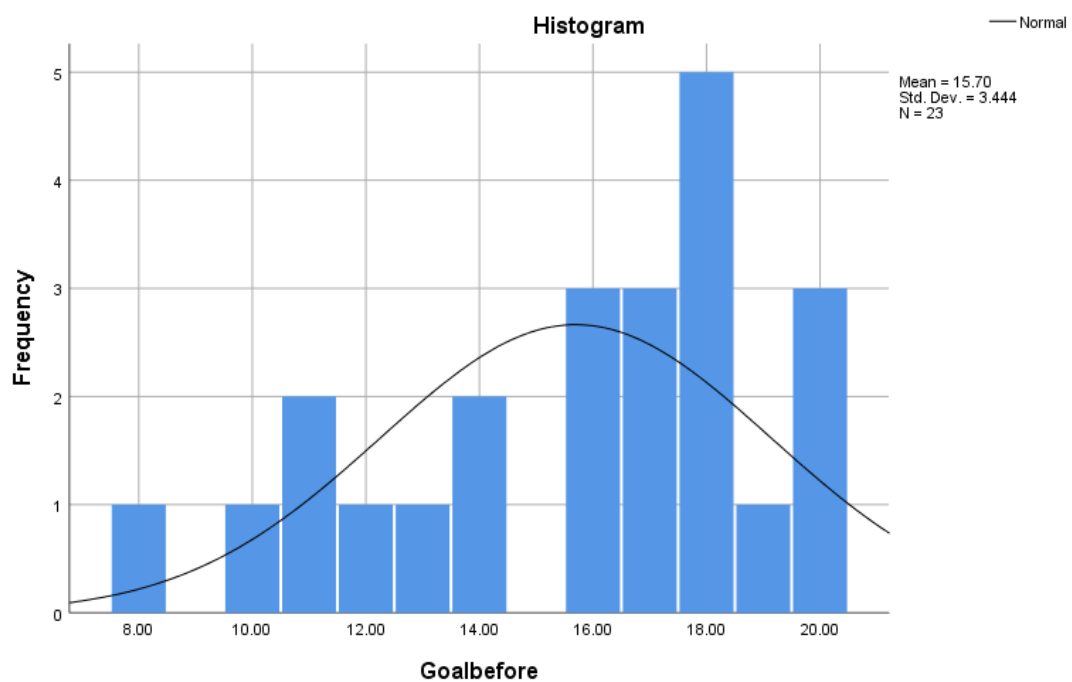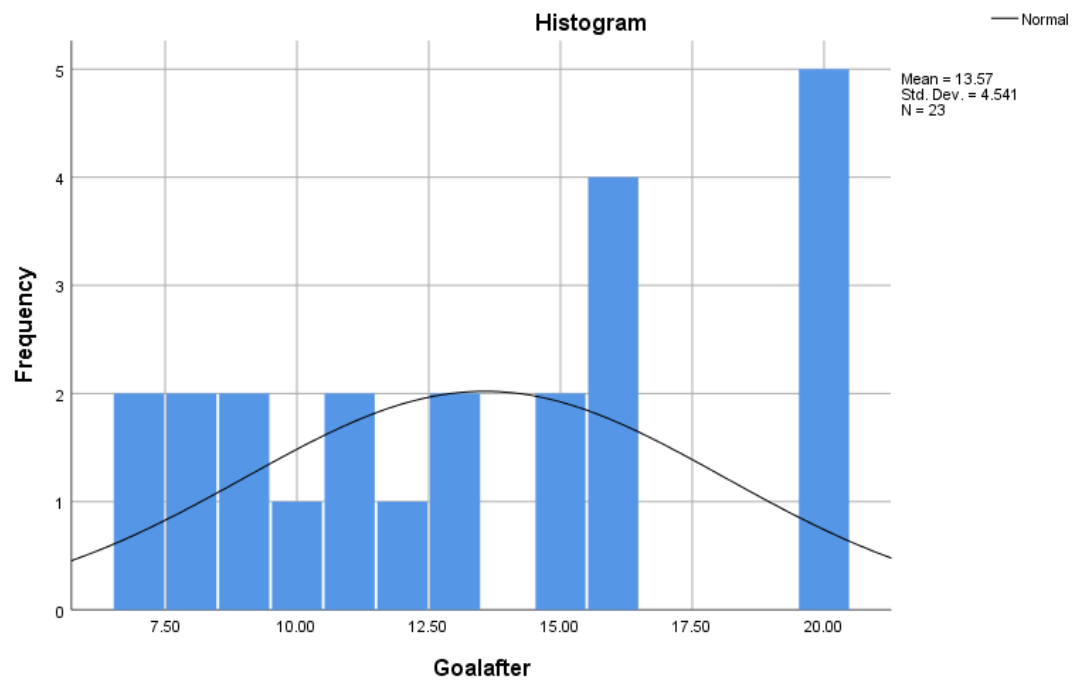
Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Fdbkbefore	23	62.2%	14	37.8%	37	100.0%
Fdbkafter	23	62.2%	14	37.8%	37	100.0%

Descriptives

			Statistic	Std. Error
Fdbkbefore	Mean		14.3043	.75818
	95% Confidence Interval for Mean	Lower Bound	12.7320	
		Upper Bound	15.8767	
	5% Trimmed Mean		14.3382	
	Median		14.0000	
	Variance		13.221	
	Std. Deviation		3.63612	
	Minimum		8.00	
	Maximum		20.00	
	Range		12.00	
	Interquartile Range		4.00	

	Skewness		-.094	.481
	Kurtosis		-.651	.935
Fdbkafter	Mean		13.0870	.91736
	95% Confidence Interval for Mean	Lower Bound	11.1845	
		Upper Bound	14.9894	
	5% Trimmed Mean		13.1860	
	Median		12.0000	
	Variance		19.356	
	Std. Deviation		4.39951	
	Minimum		4.00	
	Maximum		20.00	
	Range		16.00	
	Interquartile Range		7.00	
	Skewness		.024	.481
	Kurtosis		-.549	.935

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Fdbkbefore	.119	23	.200[*]	.948	23	.267
Fdbkafter	.119	23	.200[*]	.960	23	.467

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Fdbkbefore
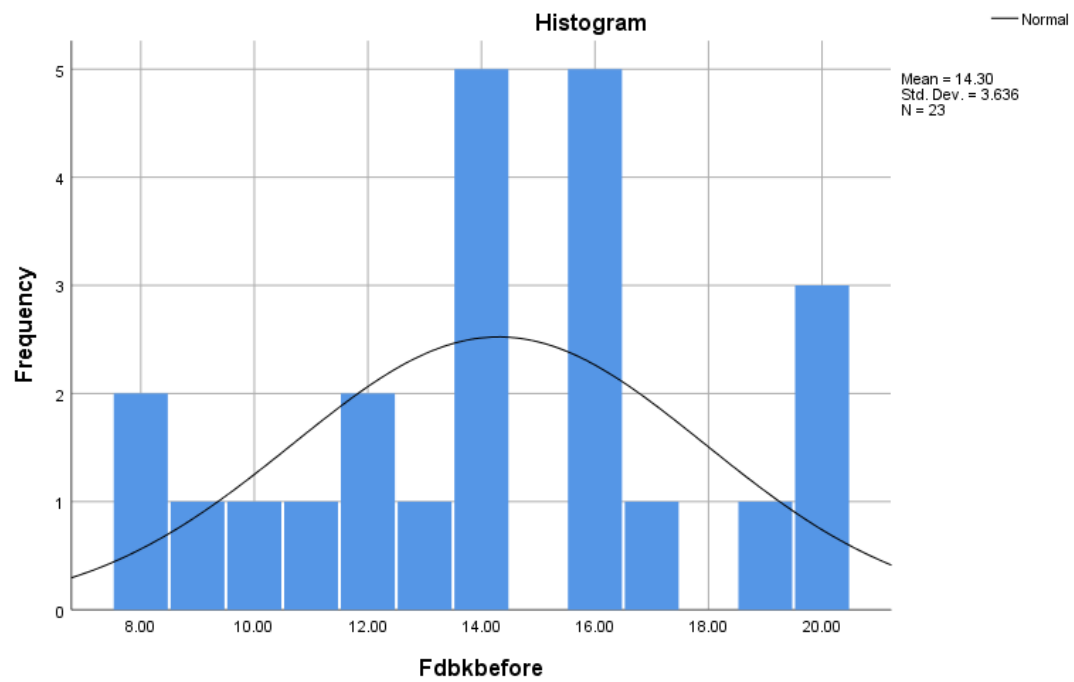
Fdbkafter
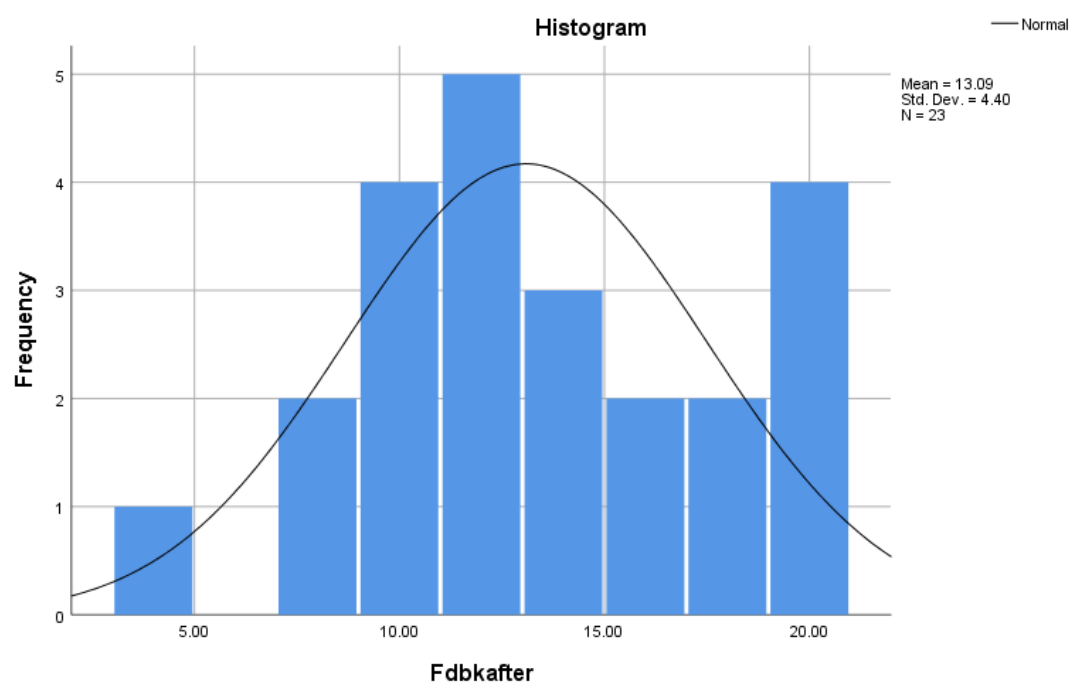
Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Concbefore	23	62.2%	14	37.8%	37	100.0%
Concafter	23	62.2%	14	37.8%	37	100.0%

Descriptives

			Statistic	Std. Error
Concbefore	Mean		15.8261	.74296
	95% Confidence Interval for Mean	Lower Bound	14.2853	
		Upper Bound	17.3669	
	5% Trimmed Mean		15.9662	
	Median		16.0000	
	Variance		12.696	
	Std. Deviation		3.56310	
	Minimum		9.00	
	Maximum		20.00	
	Range		11.00	
	Interquartile Range		7.00	
	Skewness		-.399	.481
	Kurtosis		-1.010	.935
Concafter	Mean		17.1739	.60188
	95% Confidence Interval for Mean	Lower Bound	15.9257	
		Upper Bound	18.4221	
	5% Trimmed Mean		17.4348	
	Median		17.0000	
	Variance		8.332	
	Std. Deviation		2.88652	
	Minimum		9.00	
	Maximum		20.00	
	Range		11.00	
	Interquartile Range		4.00	
	Skewness		-.948	.481
	Kurtosis		1.170	.935

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Concbefore	.140	23	.200[*]	.916	23	.055
Concafter	.228	23	.003	.845	23	.002

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Concbefore
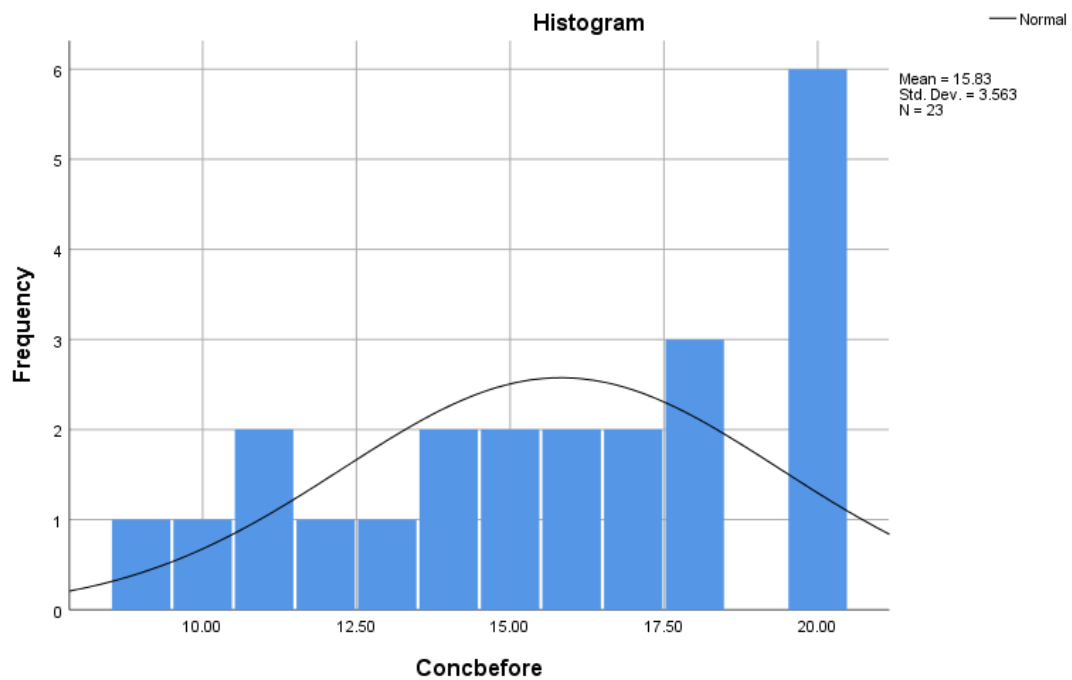
Concafter
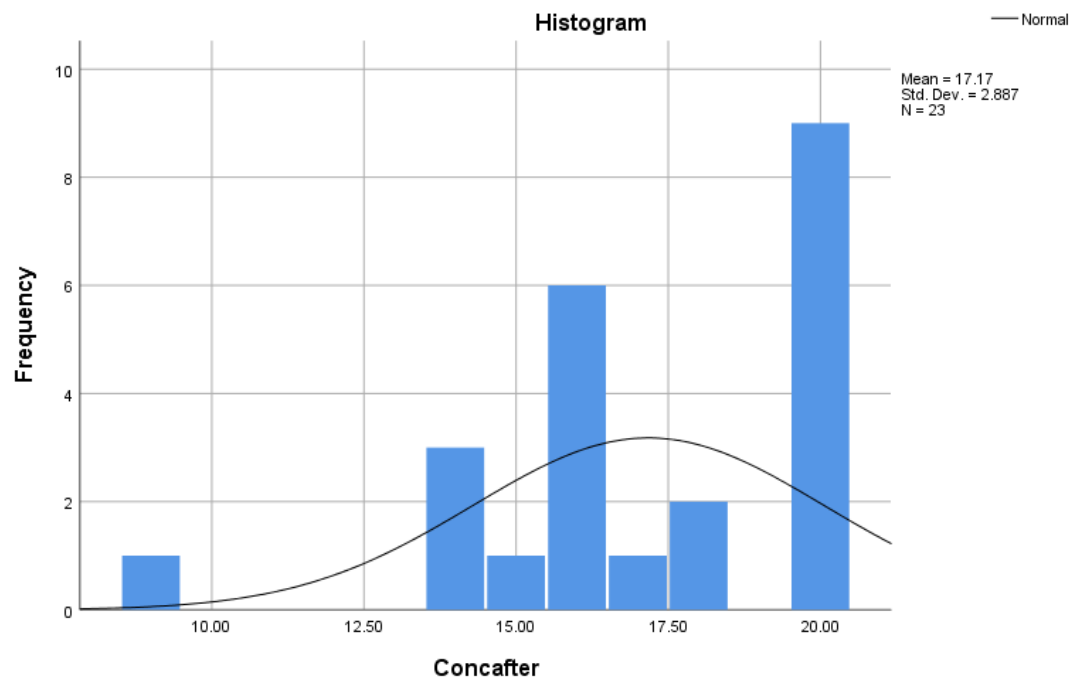
Histogram

Mean = 17.17
Std. Dev. = 2.887
N = 23

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Contbefore	.194	23	.025	.878	23	.009
Contafter	.182	23	.046	.920	23	.066

a. Lilliefors Significance Correction

Contbefore
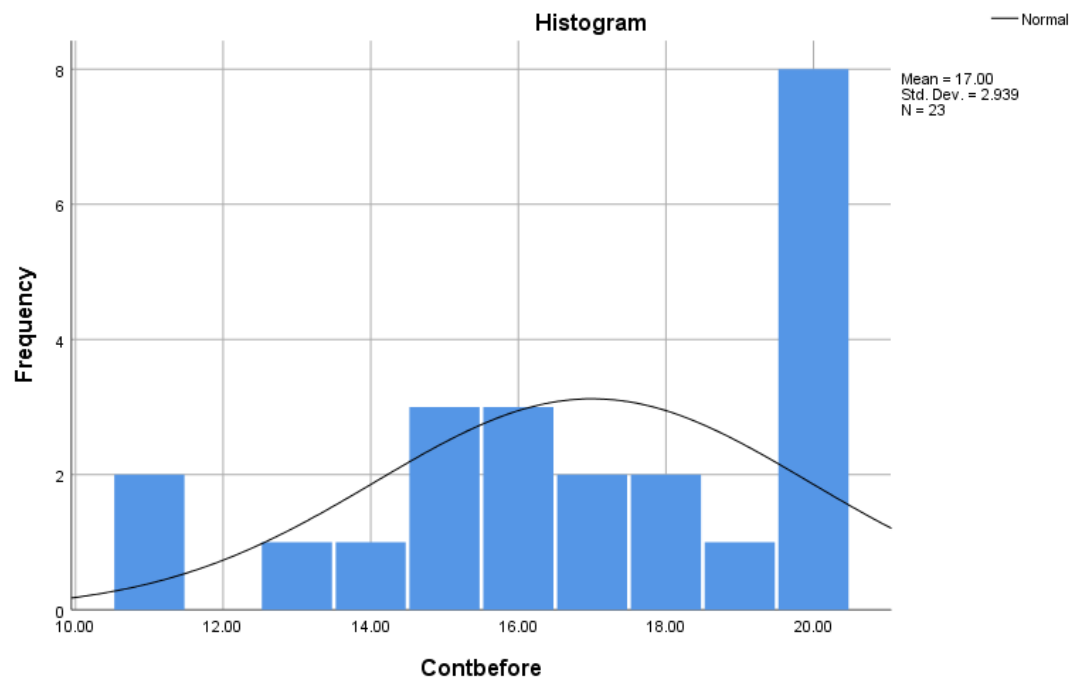
Contafter
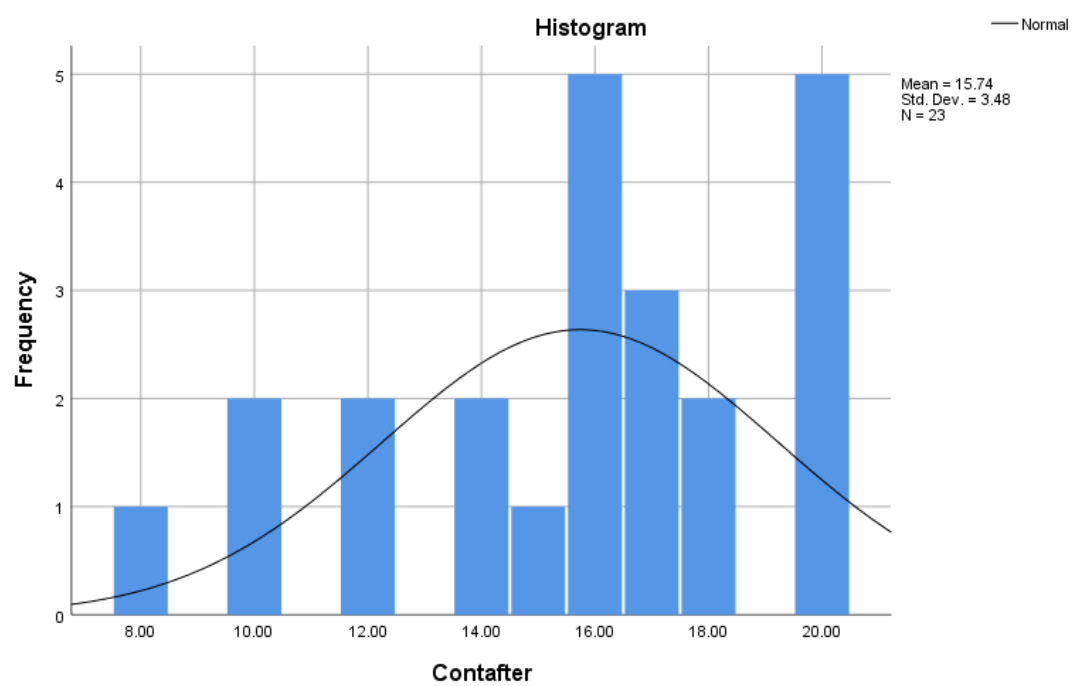
Case Processing Summary

Cases

	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Lossbefore	23	62.2%	14	37.8%	37	100.0%
Lossafter	23	62.2%	14	37.8%	37	100.0%

Descriptives

			Statistic	Std. Error
Lossbefore	Mean		14.2609	.88290
	95% Confidence Interval for Mean	Lower Bound	12.4298	
		Upper Bound	16.0919	
	5% Trimmed Mean		14.3382	
	Median		14.0000	
	Variance		17.929	
	Std. Deviation		4.23425	
	Minimum		7.00	
	Maximum		20.00	
	Range		13.00	
	Interquartile Range		6.00	
	Skewness		-.116	.481
	Kurtosis		-1.084	.935
Lossafter	Mean		14.7391	1.09475
	95% Confidence Interval for Mean	Lower Bound	12.4687	
		Upper Bound	17.0095	
	5% Trimmed Mean		14.9734	
	Median		17.0000	
	Variance		27.565	
	Std. Deviation		5.25026	
	Minimum		5.00	
	Maximum		20.00	
	Range		15.00	
	Interquartile Range		11.00	
	Skewness		-.464	.481
	Kurtosis		-1.399	.935

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.

Lossbefore	.130	23	.200*	.932	23	.123
Lossafter	.226	23	.003	.849	23	.003

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Lossbefore

Histogram

Mean = 14.74
Std. Dev. = 5.25
N = 23

Lossafter
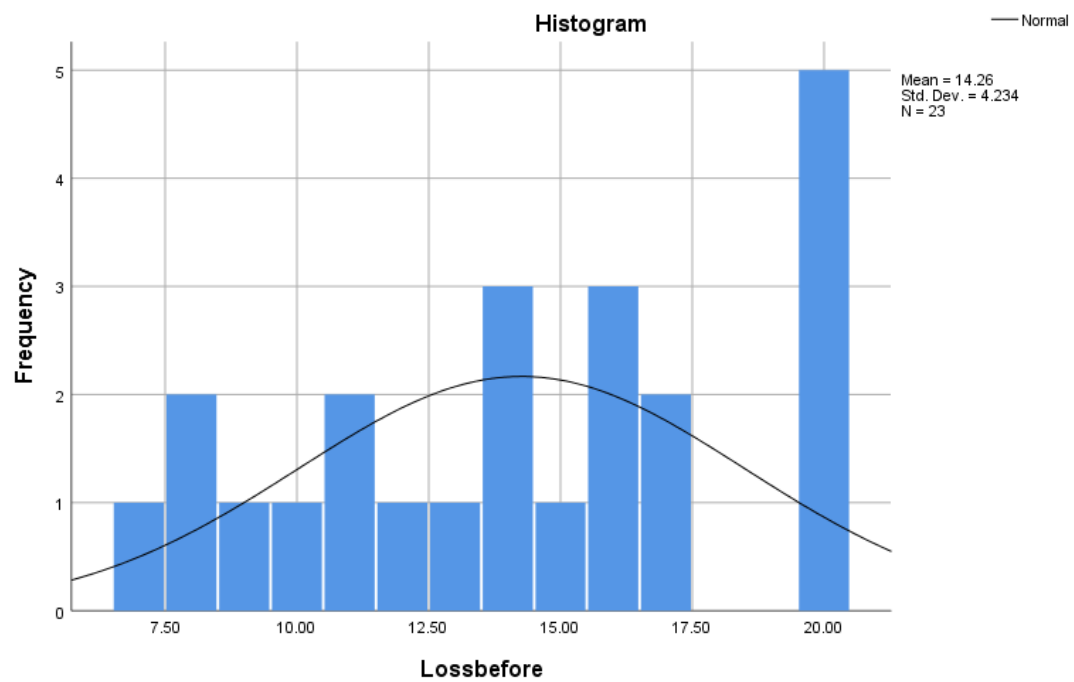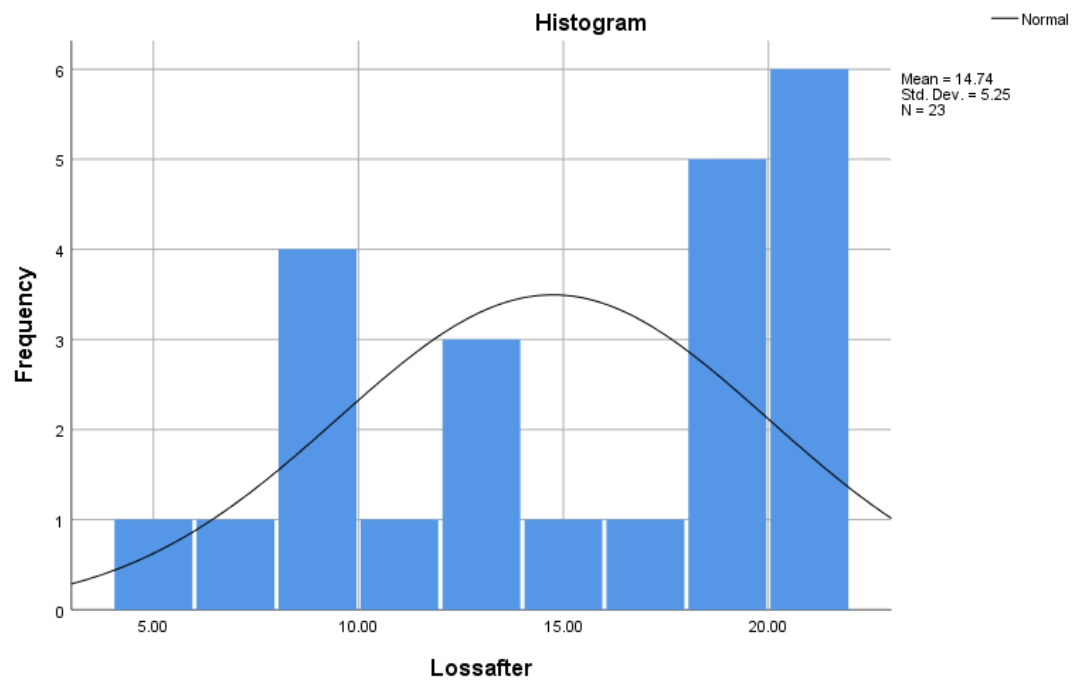
Descriptives

			Statistic	Std. Error
Tranbefore	Mean		10.0000	.70571
	95% Confidence Interval for Mean	Lower Bound	8.5365	
		Upper Bound	11.4635	
	5% Trimmed Mean		10.0000	
	Median		10.0000	
	Variance		11.455	
	Std. Deviation		3.38446	
	Minimum		4.00	
	Maximum		16.00	
	Range		12.00	
	Interquartile Range		6.00	
	Skewness		-.085	.481
	Kurtosis		-1.042	.935
Tranafter	Mean		12.2609	.97035
	95% Confidence Interval for Mean	Lower Bound	10.2485	
		Upper Bound	14.2732	

5% Trimmed Mean	12.2971	
Median	12.0000	
Variance	21.656	
Std. Deviation	4.65361	
Minimum	4.00	
Maximum	20.00	
Range	16.00	
Interquartile Range	6.00	
Skewness	-.466	.481
Kurtosis	-.346	.935

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Tranbefore	.158	23	.144	.961	23	.474
Tranafter	.173	23	.071	.929	23	.103

a. Lilliefors Significance Correction

Tranbefore

Histogram

Mean = 10.00
Std. Dev. = 3.384
N = 23

Tranafter

Histogram

Mean = 12.26
Std. Dev. = 4.654
N = 23
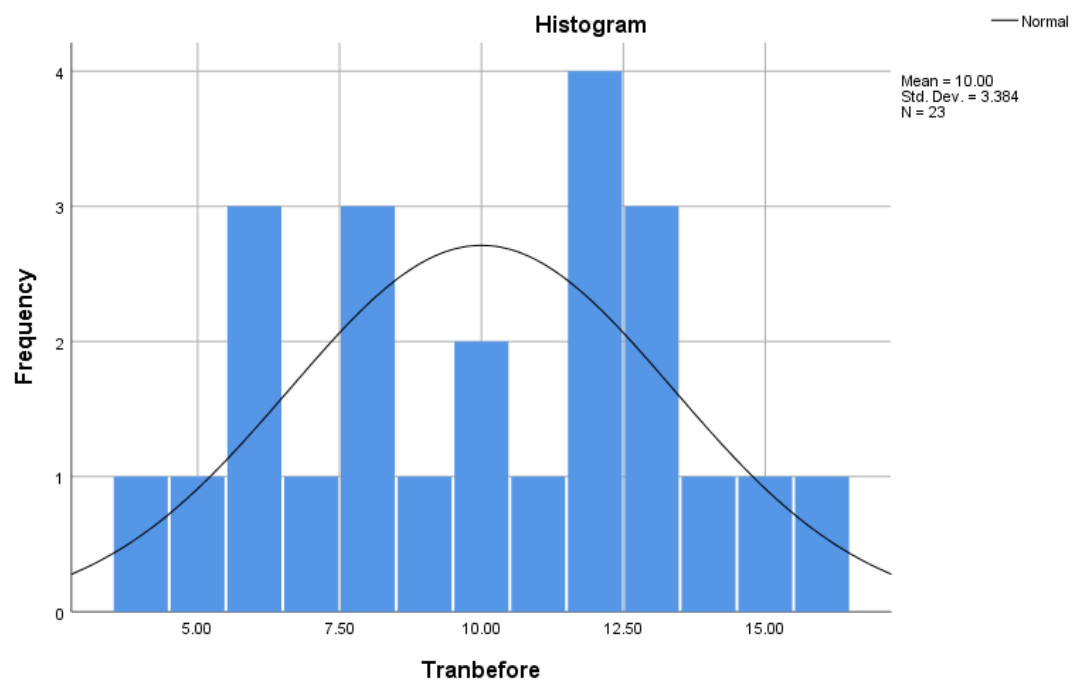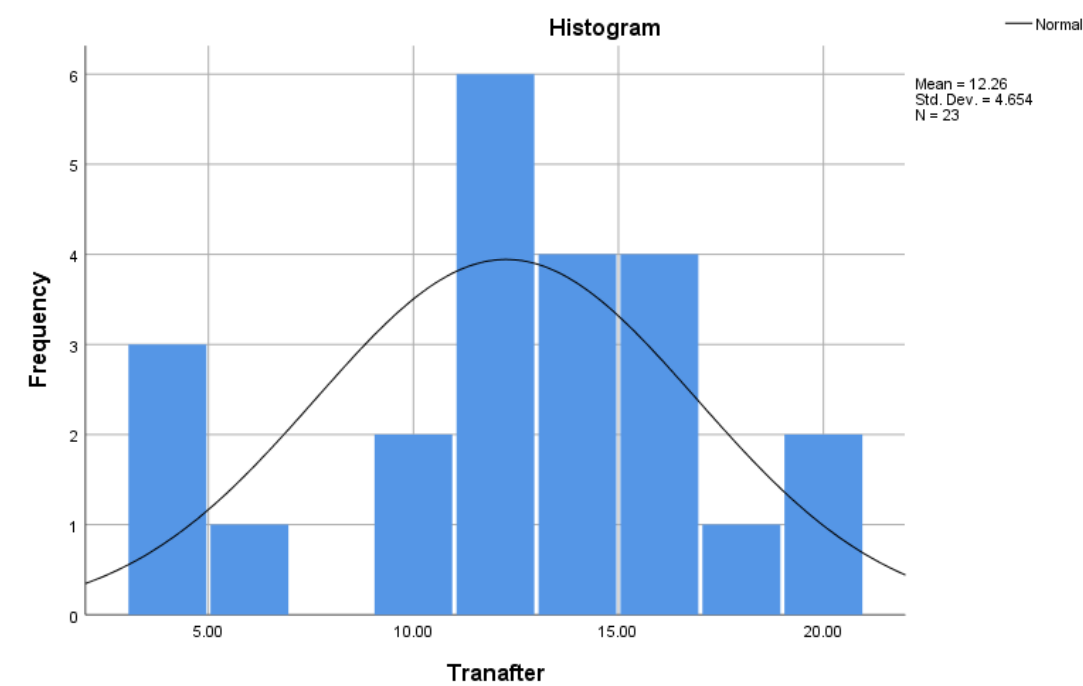
Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Enjybefore	23	62.2%	14	37.8%	37	100.0%
Enjyafter	23	62.2%	14	37.8%	37	100.0%

Descriptives

			Statistic	Std. Error
Enjybefore	Mean		11.3043	.84450
	95% Confidence Interval for Mean	Lower Bound	9.5530	
		Upper Bound	13.0557	
	5% Trimmed Mean		11.3382	

384

	Median	12.0000	
	Variance	16.403	
	Std. Deviation	4.05008	
	Minimum	4.00	
	Maximum	18.00	
	Range	14.00	
	Interquartile Range	5.00	
	Skewness	-.265	.481
	Kurtosis	-.366	.935
Enjyafter	Mean	15.7391	.74711
	95% Confidence Interval for Mean Lower Bound	14.1897	
	Upper Bound	17.2885	
	5% Trimmed Mean	15.9179	
	Median	16.0000	
	Variance	12.838	
	Std. Deviation	3.58301	
	Minimum	8.00	
	Maximum	20.00	
	Range	12.00	
	Interquartile Range	6.00	
	Skewness	-.514	.481
	Kurtosis	-.770	.935

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Enjybefore	.220	23	.005	.924	23	.080
Enjyafter	.138	23	.200[*]	.926	23	.091

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Enjybefore
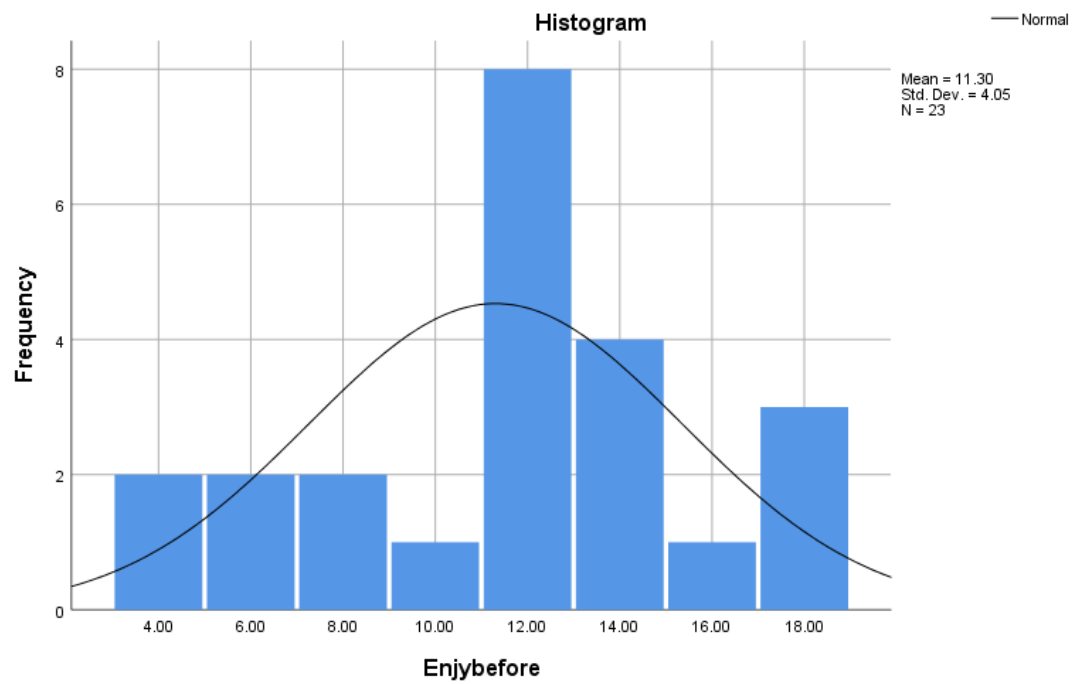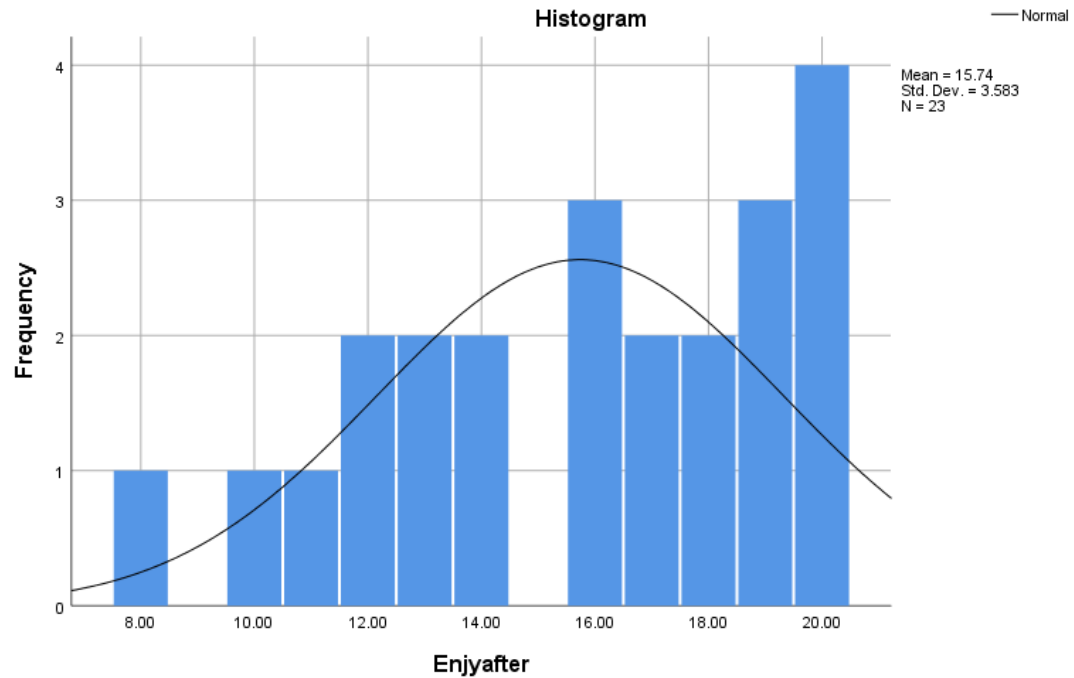
Histogram

Enjyafter

Histogram

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The median of differences between FlowbeforeSUM and FlowafterSUM equals 0.	Related-Samples Wilcoxon Signed Rank Test	.475	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The median of differences between Chalbefore and Chalafter equals 0.	Related-Samples Wilcoxon Signed Rank Test	.156	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The median of differences between Actbefore and Actafter equals 0.	Related-Samples Wilcoxon Signed Rank Test	.580	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The median of differences between Goalbefore and Goalafter equals 0.	Related-Samples Wilcoxon Signed Rank Test	.125	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The median of differences between Fdbkbefore and Fdbkafter equals 0.	Related-Samples Wilcoxon Signed Rank Test	.443	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The median of differences between Concbefore and Concafter equals 0.	Related-Samples Wilcoxon Signed Rank Test	.138	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The median of differences between Contbefore and Contafter equals 0.	Related-Samples Wilcoxon Signed Rank Test	.284	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The median of differences between Lossbefore and Lossafter equals 0.	Related-Samples Wilcoxon Signed Rank Test	.657	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The median of differences between Tranbefore and Tranafter equals 0.	Related-Samples Wilcoxon Signed Rank Test	.027	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

389

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The median of differences between Enjybefore and Enjyafter equals 0	Related-Samples Wilcoxon Signed Rank Test	.000	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

MANN WHITNEY TESTS

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of FlowafterSUM is the same across categories of Condition.	Independent-Samples Mann-Whitney U Test	.651[1]	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

[1]Exact significance is displayed for this test.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Chalafter is the same across categories of Condition.	Independent-Samples Mann-Whitney U Test	.928[1]	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

[1]Exact significance is displayed for this test.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Actafter is the same across categories of Condition.	Independent-Samples Mann-Whitney U Test	.976[1]	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

[1]Exact significance is displayed for this test.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Goalafter is the same across categories of Condition.	Independent-Samples Mann-Whitney U Test	.786[1]	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

[1]Exact significance is displayed for this test.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Fdbkafter is the same across categories of Condition.	Independent-Samples Mann-Whitney U Test	.833[1]	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

[1]Exact significance is displayed for this test.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Concafter is the same across categories of Condition.	Independent-Samples Mann-Whitney U Test	.566[1]	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

[1]Exact significance is displayed for this test.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Contafter is the same across categories of Condition.	Independent-Samples Mann-Whitney U Test	.566[1]	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

[1]Exact significance is displayed for this test.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Lossafter is the same across categories of Condition.	Independent-Samples Mann-Whitney U Test	1.000[1]	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

[1]Exact significance is displayed for this test.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Tranafter is the same across categories of Condition.	Independent-Samples Mann-Whitney U Test	.695[1]	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

[1]Exact significance is displayed for this test.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Enjyafter is the same across categories of Condition.	Independent-Samples Mann-Whitney U Test	.695[1]	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

[1]Exact significance is displayed for this test.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Engagementdiff1	24	63.2%	14	36.8%	38	100.0%
Engagementdifference2	24	63.2%	14	36.8%	38	100.0%

Descriptives

			Statistic	Std. Error
Engagementdiff1	Mean		-1.3750	.75136
	95% Confidence Interval for Mean	Lower Bound	-2.9293	
		Upper Bound	.1793	
	5% Trimmed Mean		-1.4074	
	Median		-1.5000	
	Variance		13.549	
	Std. Deviation		3.68088	
	Minimum		-8.00	
	Maximum		6.00	
	Range		14.00	
	Interquartile Range		7.00	
	Skewness		.189	.472
	Kurtosis		-.670	.918
Engagementdifference2	Mean		-3.1250	1.05348
	95% Confidence Interval for Mean	Lower Bound	-5.3043	
		Upper Bound	-.9457	
	5% Trimmed Mean		-2.7037	
	Median		-2.0000	
	Variance		26.636	
	Std. Deviation		5.16100	
	Minimum		-20.00	
	Maximum		5.00	
	Range		25.00	
	Interquartile Range		5.75	
	Skewness		-1.553	.472
	Kurtosis		3.985	.918

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Engagementdiff1	.133	24	.200[*]	.965	24	.543
Engagementdifference2	.164	24	.095	.883	24	.010

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Engagementdiff1

Histogram

Mean = -3.13
Std. Dev. = 5.161
N = 24

Engagementdifference2
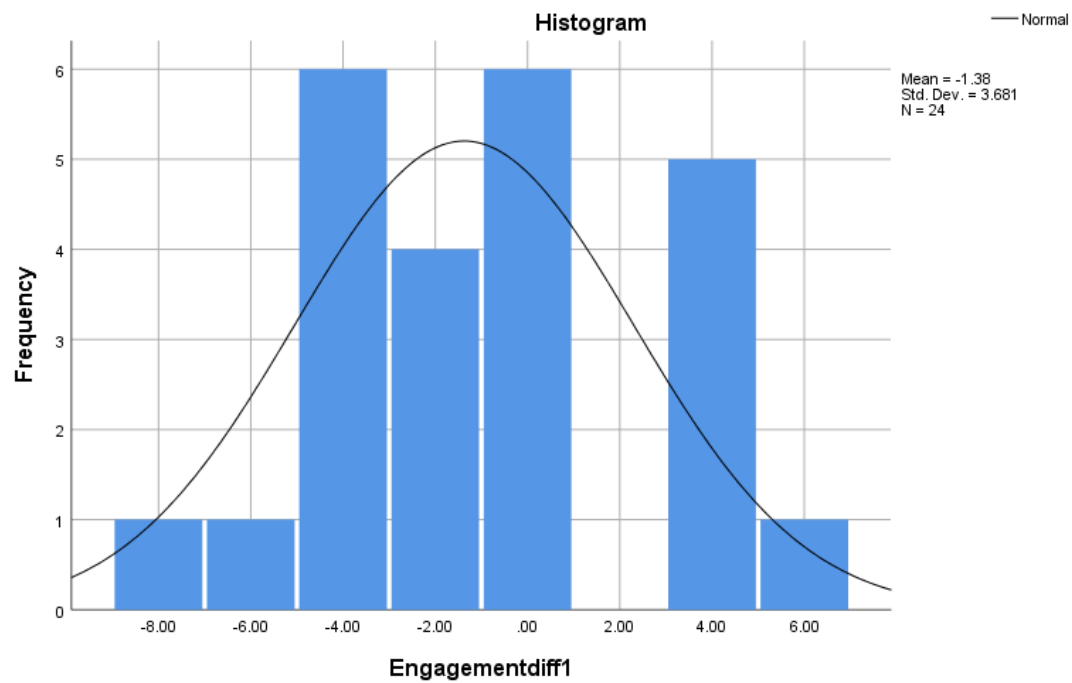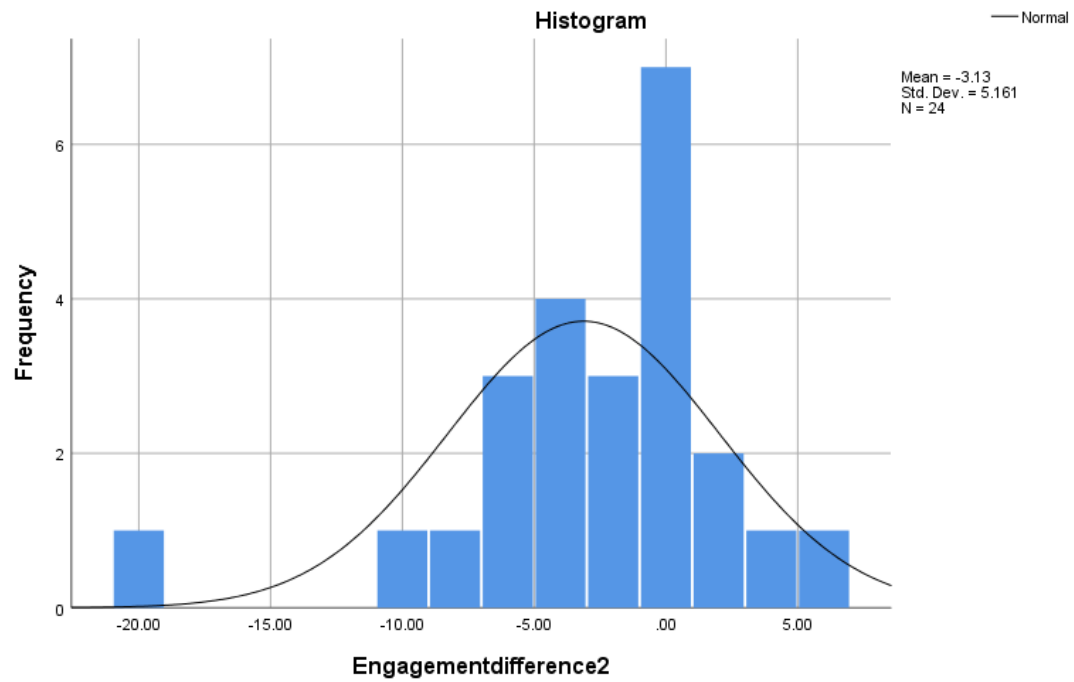
Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Distressdifference1	24	63.2%	14	36.8%	38	100.0%
Distressdifference2	24	63.2%	14	36.8%	38	100.0%

Descriptives

			Statistic	Std. Error
Distressdifference1	Mean		.5417	1.11962
	95% Confidence Interval for Mean	Lower Bound	-1.7744	
		Upper Bound	2.8578	
	5% Trimmed Mean		1.0000	
	Median		1.0000	
	Variance		30.085	
	Std. Deviation		5.48499	
	Minimum		-17.00	
	Maximum		9.00	
	Range		26.00	
	Interquartile Range		2.75	
	Skewness		-1.586	.472
	Kurtosis		4.294	.918

396

Distressdifference2	Mean		1.0000	.58359
	95% Confidence Interval for Mean	Lower Bound	-.2073	
		Upper Bound	2.2073	
	5% Trimmed Mean		1.0278	
	Median		.0000	
	Variance		8.174	
	Std. Deviation		2.85901	
	Minimum		-7.00	
	Maximum		8.00	
	Range		15.00	
	Interquartile Range		2.75	
	Skewness		-.012	.472
	Kurtosis		2.677	.918

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Distressdifference1	.264	24	.000	.828	24	.001
Distressdifference2	.262	24	.000	.842	24	.002

a. Lilliefors Significance Correction

Distressdifference1

Histogram

Mean = .54
Std. Dev. = 5.485
N = 24

Histogram

Mean = 1.00
Std. Dev. = 2.859
N = 24

398
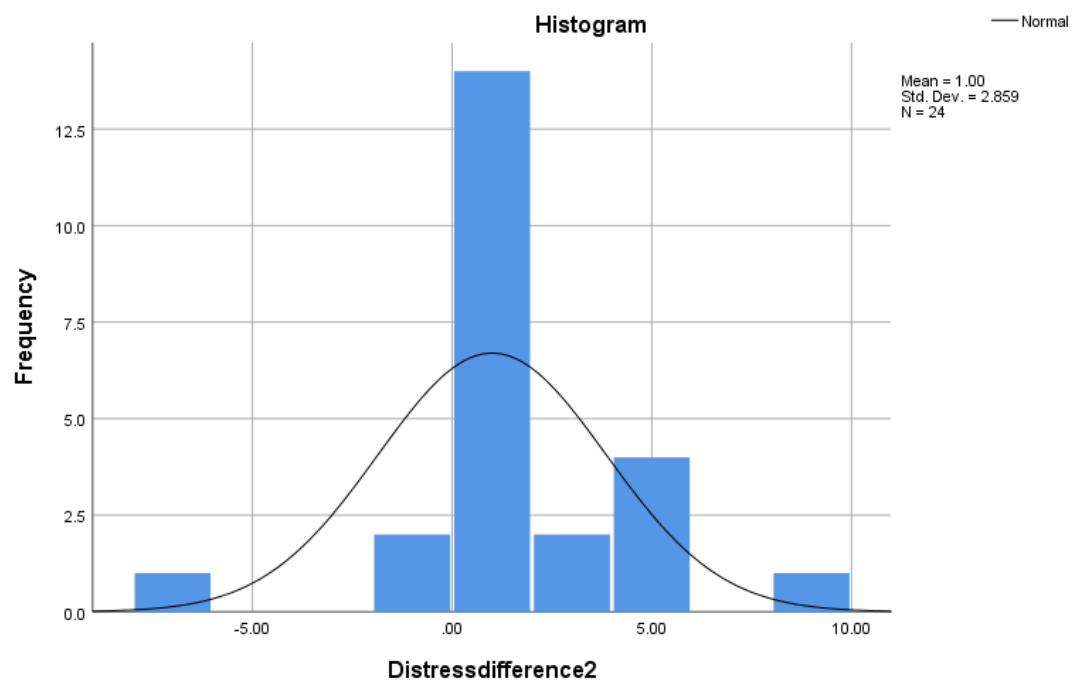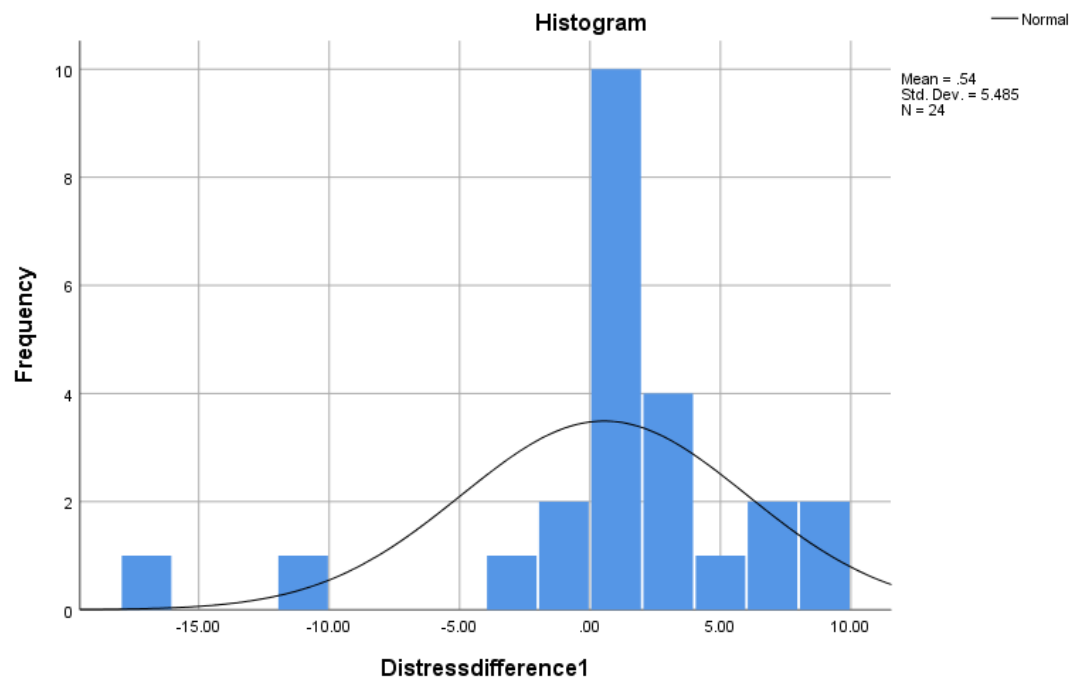
Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Worrydifference1	24	63.2%	14	36.8%	38	100.0%
Worrydifference2	24	63.2%	14	36.8%	38	100.0%

Descriptives

			Statistic	Std. Error
Worrydifference1	Mean		.3333	1.20336
	95% Confidence Interval for Mean	Lower Bound	-2.1560	
		Upper Bound	2.8227	
	5% Trimmed Mean		.1481	
	Median		.5000	
	Variance		34.754	
	Std. Deviation		5.89522	
	Minimum		-10.00	
	Maximum		14.00	
	Range		24.00	
	Interquartile Range		8.50	
	Skewness		.475	.472
	Kurtosis		.055	.918
Worrydifference2	Mean		2.0833	1.01602
	95% Confidence Interval for Mean	Lower Bound	-.0185	
		Upper Bound	4.1851	
	5% Trimmed Mean		2.0463	
	Median		2.0000	
	Variance		24.775	
	Std. Deviation		4.97749	
	Minimum		-10.00	
	Maximum		15.00	
	Range		25.00	
	Interquartile Range		5.75	
	Skewness		.149	.472
	Kurtosis		1.637	.918

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Worrydifference1	.100	24	.200[*]	.974	24	.771
Worrydifference2	.121	24	.200[*]	.961	24	.469

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Worrydifference1
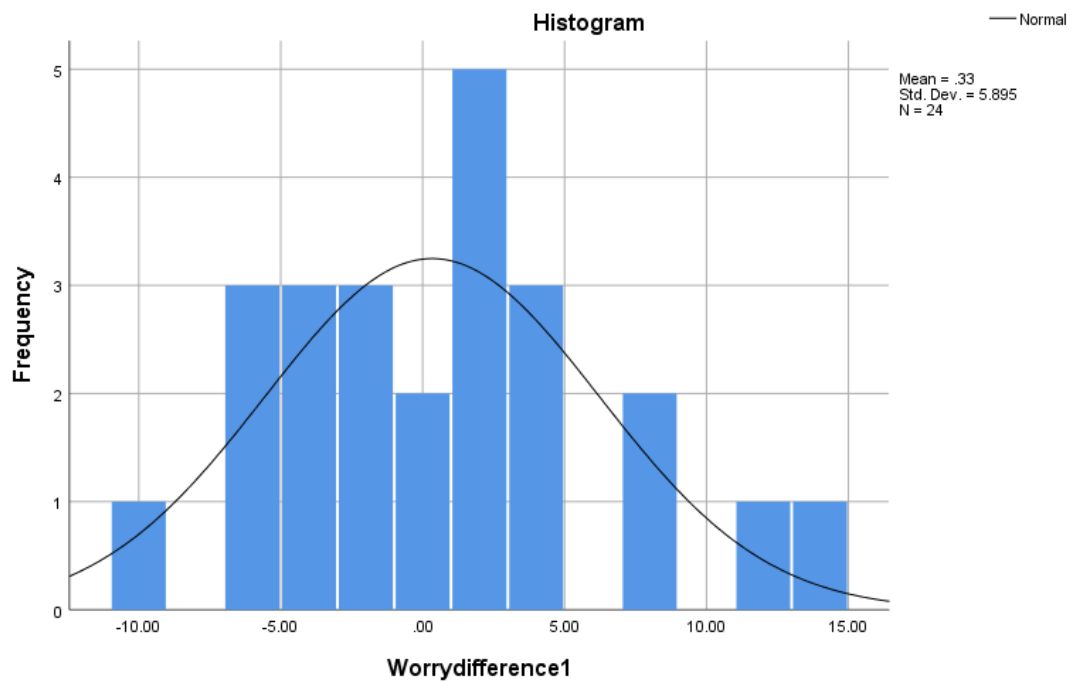
Worrydifference2
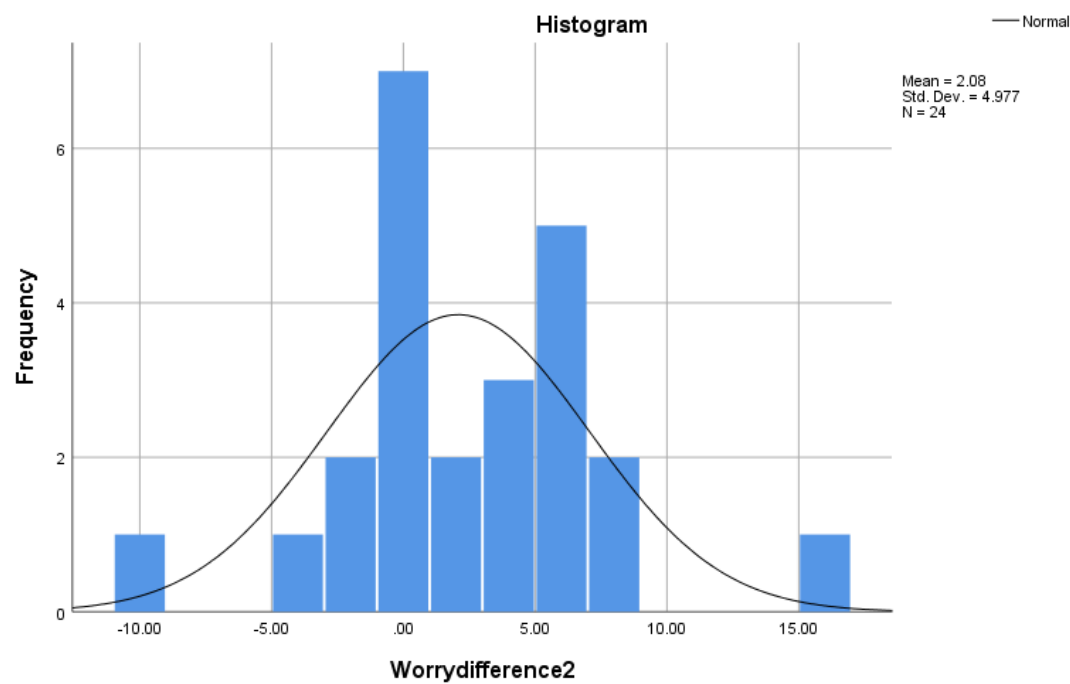
Histogram

Mean = 2.08
Std. Dev. = 4.977
N = 24

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The median of differences between Engagementdiff1 and Engagementdifference2 equals 0.	Related-Samples Wilcoxon Signed Rank Test	.384	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The median of differences between Worrydifference1 and Worrydifference2 equals 0.	Related-Samples Wilcoxon Signed Rank Test	.330	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The median of differences between Distressdifference1 and Distressdifference2 equals 0.	Related-Samples Wilcoxon Signed Rank Test	.906	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Engagementdifference2 is the same across categories of Condition.	Independent-Samples Mann-Whitney U Test	.378[1]	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

[1]Exact significance is displayed for this test.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Worrydifference2 is the same across categories of Condition.	Independent-Samples Mann-Whitney U Test	.089[1]	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

[1]Exact significance is displayed for this test.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Distressdifference2 is the same across categories of Condition.	Independent-Samples Mann-Whitney U Test	.410[1]	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

[1]Exact significance is displayed for this test.

Correlations

			FlowafterSUM	Postengagement 2
Spearman's rho	FlowafterSUM	Correlation Coefficient	1.000	.820[**]
		Sig. (1-tailed)	.	.000
		N	23	23
	Postengagement2	Correlation Coefficient	.820[**]	1.000
		Sig. (1-tailed)	.000	.
		N	23	23

[**]. Correlation is significant at the 0.01 level (1-tailed).

Correlations

			FlowafterSUM	Postworry2
Spearman's rho	FlowafterSUM	Correlation Coefficient	1.000	-.010
		Sig. (1-tailed)	.	.481
		N	23	23
	Postworry2	Correlation Coefficient	-.010	1.000
		Sig. (1-tailed)	.481	.
		N	23	23

Correlations

			FlowafterSUM	Postdistress2
Spearman's rho	FlowafterSUM	Correlation Coefficient	1.000	-.393[*]
		Sig. (1-tailed)	.	.032
		N	23	23
	Postdistress2	Correlation Coefficient	-.393[*]	1.000
		Sig. (1-tailed)	.032	.
		N	23	23

*. Correlation is significant at the 0.05 level (1-tailed).

Correlations

			Chalafter	Postengagement 2
Spearman's rho	Chalafter	Correlation Coefficient	1.000	.700[**]
		Sig. (1-tailed)	.	.000
		N	23	23
	Postengagement2	Correlation Coefficient	.700[**]	1.000
		Sig. (1-tailed)	.000	.
		N	23	23

**. Correlation is significant at the 0.01 level (1-tailed).

Correlations

			Chalafter	Postdistress2
Spearman's rho	Chalafter	Correlation Coefficient	1.000	-.554[**]
		Sig. (1-tailed)	.	.003
		N	23	23
	Postdistress2	Correlation Coefficient	-.554[**]	1.000

		Sig. (1-tailed)	.003	.
		N	23	23

**. Correlation is significant at the 0.01 level (1-tailed).

Correlations

			Chalafter	Postworry2
Spearman's rho	Chalafter	Correlation Coefficient	1.000	-.119
		Sig. (1-tailed)	.	.294
		N	23	23
	Postworry2	Correlation Coefficient	-.119	1.000
		Sig. (1-tailed)	.294	.
		N	23	23

Correlations

			Actafter	Postengagement 2
Spearman's rho	Actafter	Correlation Coefficient	1.000	.715**
		Sig. (1-tailed)	.	.000
		N	23	23
	Postengagement2	Correlation Coefficient	.715**	1.000
		Sig. (1-tailed)	.000	.
		N	23	23

**. Correlation is significant at the 0.01 level (1-tailed).

```
NONPAR CORR
```

Correlations

			Actafter	Postdistress2
Spearman's rho	Actafter	Correlation Coefficient	1.000	-.313
		Sig. (1-tailed)	.	.073
		N	23	23
	Postdistress2	Correlation Coefficient	-.313	1.000
		Sig. (1-tailed)	.073	.
		N	23	23

Nonparametric Correlations

Notes

Output Created		13-SEP-2019 13:45:18
Comments		
Input	Data	F:\Data\Hailee Pre and post flow and pre and post stress27.08.19 .sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	38
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each pair of variables are based on all the cases with valid data for that pair.
Syntax		NONPAR CORR /VARIABLES=Actafter Postworry2 /PRINT=SPEARMAN ONETAIL NOSIG /MISSING=PAIRWISE.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.00
	Number of Cases Allowed	629145 cases[a]

a. Based on availability of workspace memory

Correlations

			Actafter	Postworry2
Spearman's rho	Actafter	Correlation Coefficient	1.000	.036
		Sig. (1-tailed)	.	.435
		N	23	23

				Postengagement 2
	Postworry2	Correlation Coefficient	.036	1.000
		Sig. (1-tailed)	.435	.
		N	23	23

Correlations

			Goalafter	Postengagement 2
Spearman's rho	Goalafter	Correlation Coefficient	1.000	.397[*]
		Sig. (1-tailed)	.	.030
		N	23	23
	Postengagement2	Correlation Coefficient	.397[*]	1.000
		Sig. (1-tailed)	.030	.
		N	23	23

*. Correlation is significant at the 0.05 level (1-tailed).

Nonparametric Correlations

Notes

Output Created		13-SEP-2019 13:47:06
Comments		
Input	Data	F:\Data\Hailee Pre and post flow and pre and post stress27.08.19 .sav
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	38
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each pair of variables are based on all the cases with valid data for that pair.

			Syntax	NONPAR CORR
				/VARIABLES=Goalafter
				Postdistress2
				/PRINT=SPEARMAN
				ONETAIL NOSIG
				/MISSING=PAIRWISE.
Resources	Processor Time			00:00:00.00
	Elapsed Time			00:00:00.01
	Number of Cases Allowed		629145 cases[a]	

a. Based on availability of workspace memory

Correlations

			Goalafter	Postdistress2
Spearman's rho	Goalafter	Correlation Coefficient	1.000	-.273
		Sig. (1-tailed)	.	.103
		N	23	23
	Postdistress2	Correlation Coefficient	-.273	1.000
		Sig. (1-tailed)	.103	.
		N	23	23

Correlations

			Goalafter	Postworry2
Spearman's rho	Goalafter	Correlation Coefficient	1.000	-.178
		Sig. (1-tailed)	.	.208
		N	23	23
	Postworry2	Correlation Coefficient	-.178	1.000
		Sig. (1-tailed)	.208	.
		N	23	23

Correlations

			Fdbkafter	Postengagement 2
Spearman's rho	Fdbkafter	Correlation Coefficient	1.000	.725[**]
		Sig. (1-tailed)	.	.000
		N	23	23
	Postengagement2	Correlation Coefficient	.725[**]	1.000
		Sig. (1-tailed)	.000	.

Correlations

			Fdbkafter	Postdistress2
Spearman's rho	Fdbkafter	Correlation Coefficient	1.000	-.272
		Sig. (1-tailed)	.	.105
		N	23	23
	Postdistress2	Correlation Coefficient	-.272	1.000
		Sig. (1-tailed)	.105	.
		N	23	23

Correlations

			Fdbkafter	Postworry2
Spearman's rho	Fdbkafter	Correlation Coefficient	1.000	-.020
		Sig. (1-tailed)	.	.464
		N	23	23
	Postworry2	Correlation Coefficient	-.020	1.000
		Sig. (1-tailed)	.464	.
		N	23	23

Correlations

			Concafter	Postengagement 2
Spearman's rho	Concafter	Correlation Coefficient	1.000	.458[*]
		Sig. (1-tailed)	.	.014
		N	23	23
	Postengagement2	Correlation Coefficient	.458[*]	1.000
		Sig. (1-tailed)	.014	.
		N	23	23

*. Correlation is significant at the 0.05 level (1-tailed).

Correlations

			Concafter	Postdistress2
Spearman's rho	Concafter	Correlation Coefficient	1.000	-.008
		Sig. (1-tailed)	.	.486
		N	23	23
	Postdistress2	Correlation Coefficient	-.008	1.000

			Sig. (1-tailed)	.486	.
			N	23	23

Correlations

			Concafter	Postworry2
Spearman's rho	Concafter	Correlation Coefficient	1.000	.027
		Sig. (1-tailed)	.	.451
		N	23	23
	Postworry2	Correlation Coefficient	.027	1.000
		Sig. (1-tailed)	.451	.
		N	23	23

Correlations

			Contafter	Postengagement 2
Spearman's rho	Contafter	Correlation Coefficient	1.000	.536**
		Sig. (1-tailed)	.	.004
		N	23	23
	Postengagement2	Correlation Coefficient	.536**	1.000
		Sig. (1-tailed)	.004	.
		N	23	23

**. Correlation is significant at the 0.01 level (1-tailed).

Correlations

			Contafter	Postdistress2
Spearman's rho	Contafter	Correlation Coefficient	1.000	-.273
		Sig. (1-tailed)	.	.103
		N	23	23
	Postdistress2	Correlation Coefficient	-.273	1.000
		Sig. (1-tailed)	.103	.
		N	23	23

Correlations

			Contafter	Postworry2
Spearman's rho	Contafter	Correlation Coefficient	1.000	-.271
		Sig. (1-tailed)	.	.106
		N	23	23
	Postworry2	Correlation Coefficient	-.271	1.000
		Sig. (1-tailed)	.106	.
		N	23	23

Correlations

			Lossafter	Postengagement 2
Spearman's rho	Lossafter	Correlation Coefficient	1.000	.594**
		Sig. (1-tailed)	.	.001
		N	23	23
	Postengagement2	Correlation Coefficient	.594**	1.000
		Sig. (1-tailed)	.001	.
		N	23	23

**. Correlation is significant at the 0.01 level (1-tailed).

Correlations

			Lossafter	Postdistress2
Spearman's rho	Lossafter	Correlation Coefficient	1.000	-.273
		Sig. (1-tailed)	.	.104
		N	23	23
	Postdistress2	Correlation Coefficient	-.273	1.000
		Sig. (1-tailed)	.104	.
		N	23	23

Correlations

			Lossafter	Postworry2
Spearman's rho	Lossafter	Correlation Coefficient	1.000	-.434*
		Sig. (1-tailed)	.	.019
		N	23	23
	Postworry2	Correlation Coefficient	-.434*	1.000
		Sig. (1-tailed)	.019	.
		N	23	23

*. Correlation is significant at the 0.05 level (1-tailed).

Correlations

			Tranafter	Postengagement 2
Spearman's rho	Tranafter	Correlation Coefficient	1.000	.438[*]
		Sig. (1-tailed)	.	.018
		N	23	23
	Postengagement2	Correlation Coefficient	.438[*]	1.000
		Sig. (1-tailed)	.018	.
		N	23	23

*. Correlation is significant at the 0.05 level (1-tailed).

Correlations

			Tranafter	Postdistress2
Spearman's rho	Tranafter	Correlation Coefficient	1.000	-.141
		Sig. (1-tailed)	.	.261
		N	23	23
	Postdistress2	Correlation Coefficient	-.141	1.000
		Sig. (1-tailed)	.261	.
		N	23	23

Correlations

			Tranafter	Postworry2
Spearman's rho	Tranafter	Correlation Coefficient	1.000	.298
		Sig. (1-tailed)	.	.083
		N	23	23
	Postworry2	Correlation Coefficient	.298	1.000
		Sig. (1-tailed)	.083	.
		N	23	23

Correlations

			Enjyafter	Postengagement 2
Spearman's rho	Enjyafter	Correlation Coefficient	1.000	.726[**]
		Sig. (1-tailed)	.	.000

			23	23
Postengagement2	Correlation Coefficient		.726**	1.000
	Sig. (1-tailed)		.000	.
	N		23	23

**. Correlation is significant at the 0.01 level (1-tailed).

Correlations

			Enjyafter	Postdistress2
Spearman's rho	Enjyafter	Correlation Coefficient	1.000	-.384*
		Sig. (1-tailed)	.	.035
		N	23	23
	Postdistress2	Correlation Coefficient	-.384*	1.000
		Sig. (1-tailed)	.035	.
		N	23	23

*. Correlation is significant at the 0.05 level (1-tailed).

Correlations

			Enjyafter	Postworry2
Spearman's rho	Enjyafter	Correlation Coefficient	1.000	.095
		Sig. (1-tailed)	.	.332
		N	23	23
	Postworry2	Correlation Coefficient	.095	1.000
		Sig. (1-tailed)	.332	.
		N	23	23

Correlations

			FlowbeforeSUM	Engagementdiff1
Spearman's rho	FlowbeforeSUM	Correlation Coefficient	1.000	-.177
		Sig. (1-tailed)	.	.210
		N	23	23
	Engagementdiff1	Correlation Coefficient	-.177	1.000
		Sig. (1-tailed)	.210	.
		N	23	23

Correlations

			FlowbeforeSUM	Distressdifference1
Spearman's rho	FlowbeforeSUM	Correlation Coefficient	1.000	.503**
		Sig. (1-tailed)	.	.007
		N	23	23
	Distressdifference1	Correlation Coefficient	.503**	1.000
		Sig. (1-tailed)	.007	.
		N	23	23

**. Correlation is significant at the 0.01 level (1-tailed).

Correlations

			FlowbeforeSUM	Worrydifference1
Spearman's rho	FlowbeforeSUM	Correlation Coefficient	1.000	.112
		Sig. (1-tailed)	.	.305
		N	23	23
	Worrydifference1	Correlation Coefficient	.112	1.000
		Sig. (1-tailed)	.305	.
		N	23	23

Correlations

			FlowafterSUM	Engagementdifference2
Spearman's rho	FlowafterSUM	Correlation Coefficient	1.000	-.305
		Sig. (1-tailed)	.	.079
		N	23	23
	Engagementdifference2	Correlation Coefficient	-.305	1.000
		Sig. (1-tailed)	.079	.
		N	23	23

Correlations

			FlowafterSUM	Worrydifference2
Spearman's rho	FlowafterSUM	Correlation Coefficient	1.000	.151
		Sig. (1-tailed)	.	.246
		N	23	23
	Worrydifference2	Correlation Coefficient	.151	1.000
		Sig. (1-tailed)	.246	.
		N	23	23

Correlations

			FlowafterSUM	Distressdifference2
Spearman's rho	FlowafterSUM	Correlation Coefficient	1.000	.262
		Sig. (1-tailed)	.	.113
		N	23	23
	Distressdifference2	Correlation Coefficient	.262	1.000
		Sig. (1-tailed)	.113	.
		N	23	23

Case Processing Summary

		Cases					
		Valid		Missing		Total	
	Condition	N	Percent	N	Percent	N	Percent
FlowafterSUM	group	12	100.0%	0	0.0%	12	100.0%
	individual	11	100.0%	0	0.0%	11	100.0%

Descriptives

	Condition			Statistic	Std. Error
FlowafterSUM	group	Mean		129.4167	6.78172
		95% Confidence Interval for Mean	Lower Bound	114.4902	
			Upper Bound	144.3431	
		5% Trimmed Mean		129.7407	
		Median		131.0000	
		Variance		551.902	
		Std. Deviation		23.49258	
		Minimum		86.00	
		Maximum		167.00	
		Range		81.00	
		Interquartile Range		37.75	

		Skewness		-.254	.637
		Kurtosis		-.209	1.232
	individual	Mean		131.2727	9.09754
		95% Confidence Interval for Mean	Lower Bound	111.0021	
			Upper Bound	151.5433	
		5% Trimmed Mean		131.3030	
		Median		135.0000	
		Variance		910.418	
		Std. Deviation		30.17314	
		Minimum		86.00	
		Maximum		176.00	
		Range		90.00	
		Interquartile Range		56.00	
		Skewness		-.100	.661
		Kurtosis		-.835	1.279

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Condition	Statistic	df	Sig.	Statistic	df	Sig.
FlowafterSUM	group	.175	12	.200[*]	.962	12	.807
	individual	.186	11	.200[*]	.928	11	.386

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

FlowafterSUM

Histograms
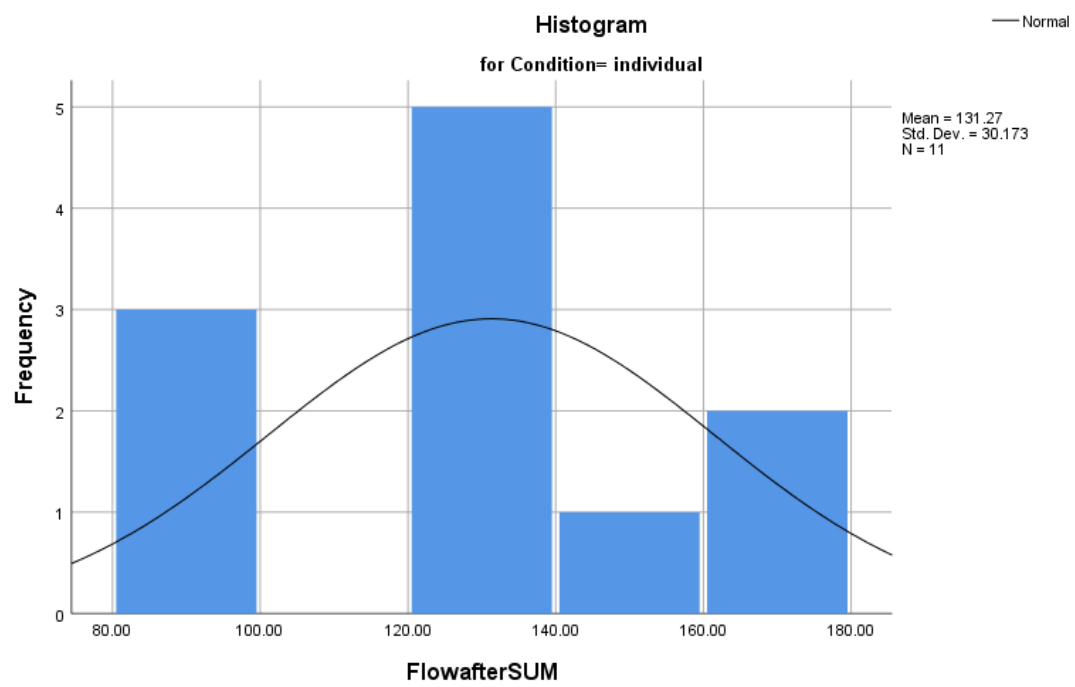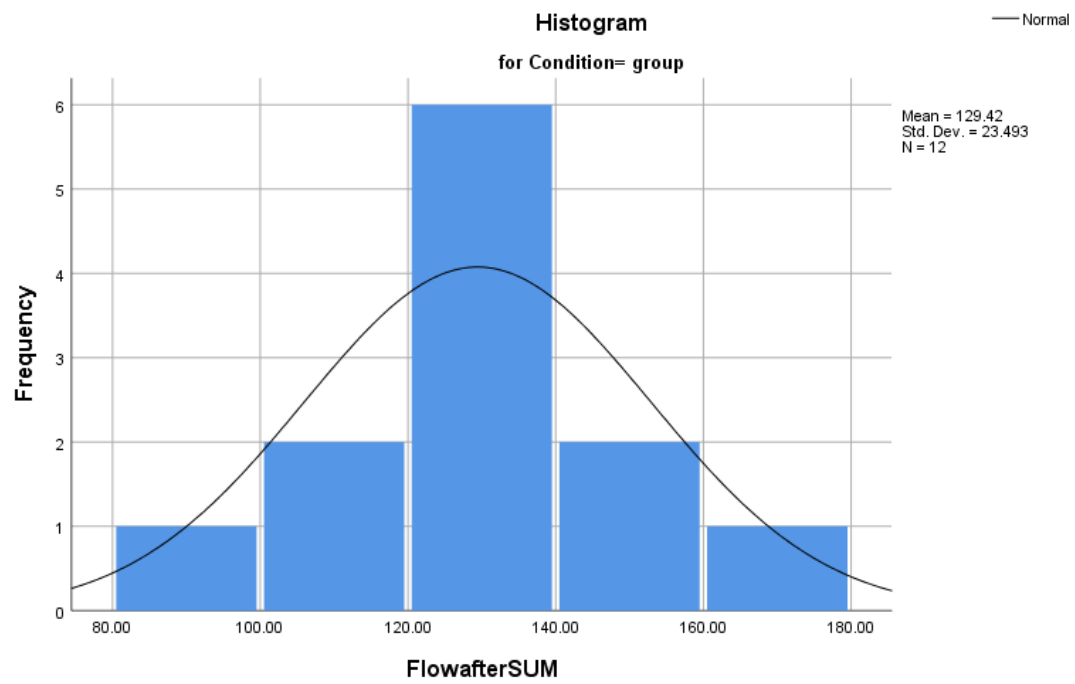
Histogram

for Condition= group

Mean = 129.42
Std. Dev. = 23.493
N = 12

FlowafterSUM

Histogram

for Condition= individual

Mean = 131.27
Std. Dev. = 30.173
N = 11

FlowafterSUM

Condition

417

Case Processing Summary

| | Condition | Cases | | | | | |
| | | Valid | | Missing | | Total | |
		N	Percent	N	Percent	N	Percent
Chalafter	group	12	100.0%	0	0.0%	12	100.0%
	individual	11	100.0%	0	0.0%	11	100.0%

Descriptives

	Condition			Statistic	Std. Error
Chalafter	group	Mean		14.0833	1.25805
		95% Confidence Interval for Mean	Lower Bound	11.3144	
			Upper Bound	16.8523	
		5% Trimmed Mean		14.3148	
		Median		14.0000	
		Variance		18.992	
		Std. Deviation		4.35803	
		Minimum		5.00	
		Maximum		19.00	
		Range		14.00	
		Interquartile Range		5.75	
		Skewness		-.819	.637
		Kurtosis		.270	1.232
	individual	Mean		13.8182	1.40012
		95% Confidence Interval for Mean	Lower Bound	10.6985	
			Upper Bound	16.9378	
		5% Trimmed Mean		13.8535	
		Median		15.0000	
		Variance		21.564	
		Std. Deviation		4.64367	
		Minimum		7.00	
		Maximum		20.00	
		Range		13.00	
		Interquartile Range		9.00	
		Skewness		-.042	.661
		Kurtosis		-1.511	1.279

Tests of Normality

	Condition	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Chalafter	group	.152	12	.200[*]	.912	12	.224
	individual	.158	11	.200[*]	.922	11	.335

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Chalafter

Histograms
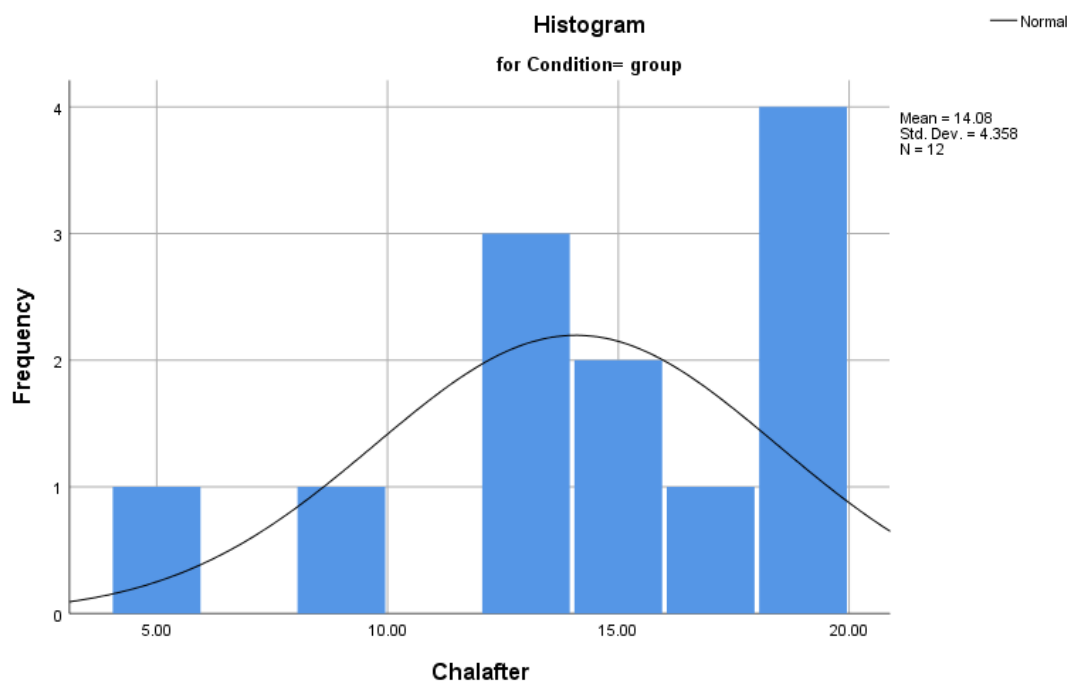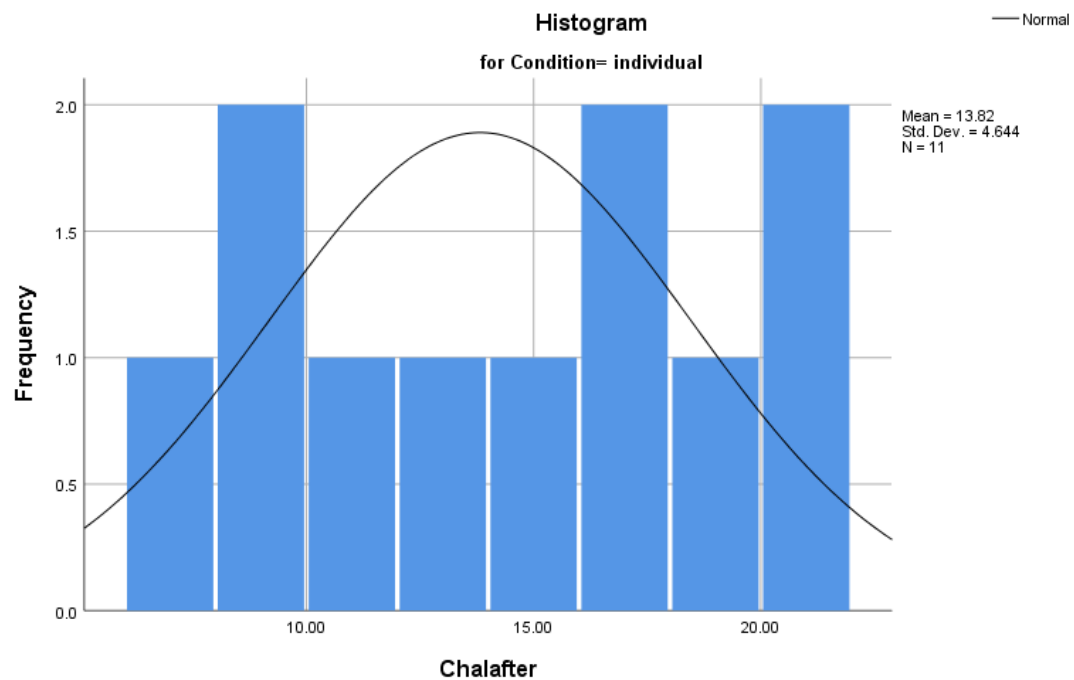
Histogram

for Condition= group

Mean = 14.08
Std. Dev. = 4.358
N = 12

Histogram

for Condition= individual

Mean = 13.82
Std. Dev. = 4.644
N = 11

Case Processing Summary

		Cases					
		Valid		Missing		Total	
	Condition	N	Percent	N	Percent	N	Percent
Actafter	group	12	100.0%	0	0.0%	12	100.0%
	individual	11	100.0%	0	0.0%	11	100.0%

Descriptives

	Condition			Statistic	Std. Error
Actafter	group	Mean		14.1667	1.24823
		95% Confidence Interval for Mean	Lower Bound	11.4193	
			Upper Bound	16.9140	
		5% Trimmed Mean		14.2407	
		Median		15.0000	
		Variance		18.697	
		Std. Deviation		4.32400	
		Minimum		7.00	
		Maximum		20.00	
		Range		13.00	

420

		Interquartile Range		7.00	
		Skewness		-.290	.637
		Kurtosis		-.889	1.232
	individual	Mean		13.9091	1.71334
		95% Confidence Interval for Mean	Lower Bound	10.0915	
			Upper Bound	17.7267	
		5% Trimmed Mean		14.0657	
		Median		14.0000	
		Variance		32.291	
		Std. Deviation		5.68251	
		Minimum		5.00	
		Maximum		20.00	
		Range		15.00	
		Interquartile Range		12.00	
		Skewness		-.398	.661
		Kurtosis		-1.307	1.279

Tests of Normality

	Condition	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Actafter	group	.164	12	.200[*]	.947	12	.596
	individual	.178	11	.200[*]	.891	11	.145

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Actafter

Histograms
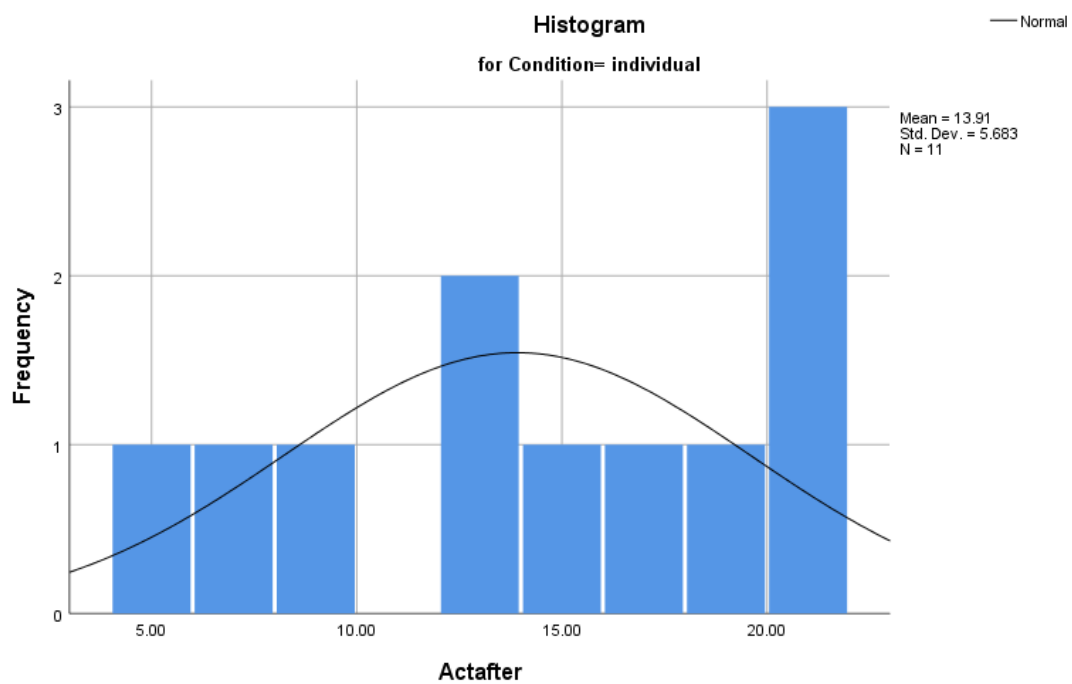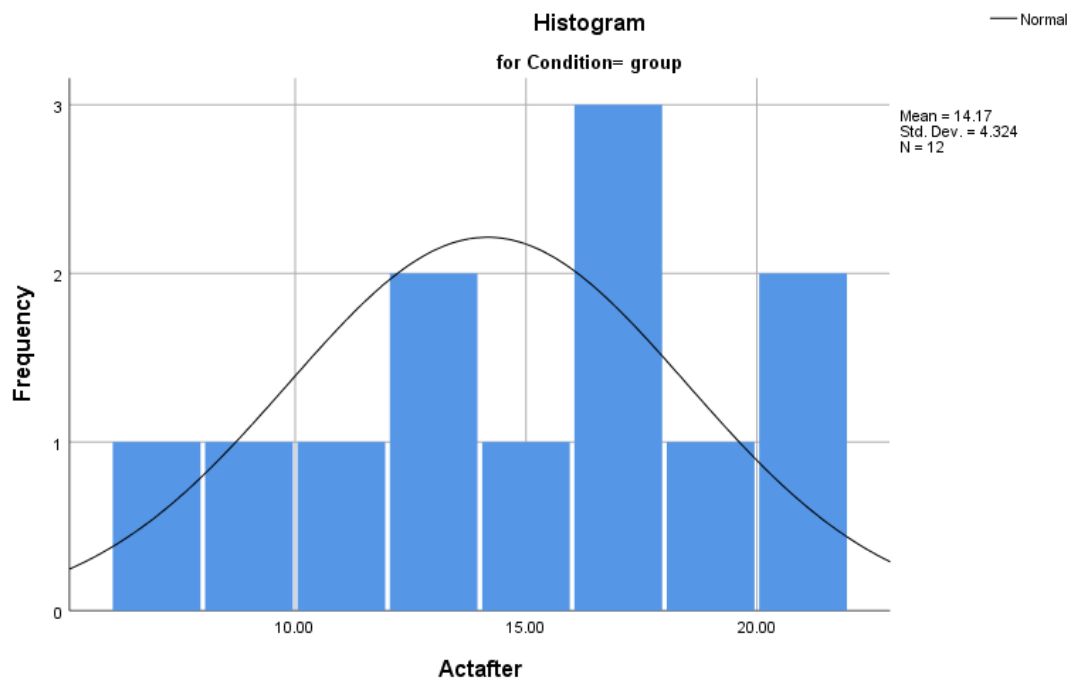
Histogram

for Condition= group

— Normal

Mean = 14.17
Std. Dev. = 4.324
N = 12

Histogram

for Condition= individual

— Normal

Mean = 13.91
Std. Dev. = 5.683
N = 11

Case Processing Summary

		Cases					
		Valid		Missing		Total	
	Condition	N	Percent	N	Percent	N	Percent
Goalafter	group	12	100.0%	0	0.0%	12	100.0%

		individual	11	100.0%	0	0.0%	11	100.0%

Descriptives

	Condition			Statistic	Std. Error
Goalafter	group	Mean		13.2500	1.33782
		95% Confidence Interval for Mean	Lower Bound	10.3055	
			Upper Bound	16.1945	
		5% Trimmed Mean		13.2222	
		Median		14.0000	
		Variance		21.477	
		Std. Deviation		4.63436	
		Minimum		7.00	
		Maximum		20.00	
		Range		13.00	
		Interquartile Range		7.00	
		Skewness		.032	.637
		Kurtosis		-1.279	1.232
	individual	Mean		13.9091	1.39775
		95% Confidence Interval for Mean	Lower Bound	10.7947	
			Upper Bound	17.0235	
		5% Trimmed Mean		13.8990	
		Median		13.0000	
		Variance		21.491	
		Std. Deviation		4.63583	
		Minimum		8.00	
		Maximum		20.00	
		Range		12.00	
		Interquartile Range		10.00	
		Skewness		.225	.661
		Kurtosis		-1.425	1.279

Tests of Normality

	Condition	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Goalafter	group	.154	12	.200[*]	.917	12	.260
	individual	.178	11	.200[*]	.897	11	.170

*. This is a lower bound of the true significance.

Histograms

Histogram

for Condition= group

Mean = 13.25
Std. Dev. = 4.634
N = 12

Histogram

for Condition= individual

Mean = 13.91
Std. Dev. = 4.636
N = 11

Goalafter
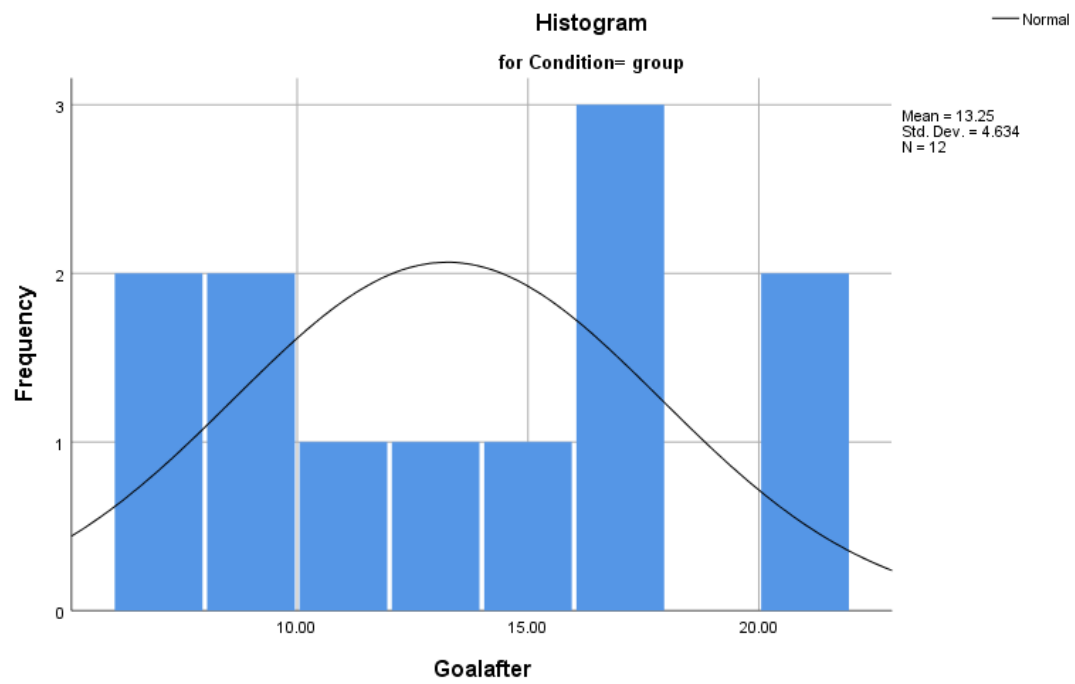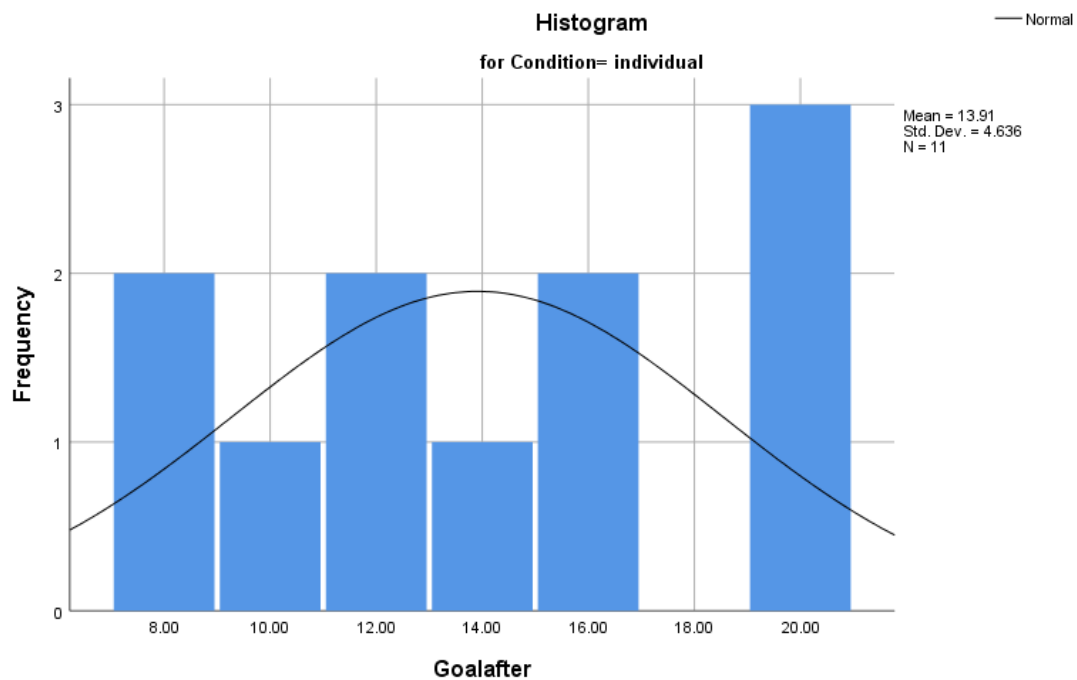
Notes

Output Created		21-NOV-2019 15:21:05
Comments		
Input	Data	F:\Data\Hailee Pre and post flow and pre and post stress27.08.19 .sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	38
Missing Value Handling	Definition of Missing	User-defined missing values for dependent variables are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any dependent variable or factor used.

425

Syntax			EXAMINE VARIABLES=Fdbkafter BY Condition /PLOT BOXPLOT HISTOGRAM NPPLOT /COMPARE GROUPS /STATISTICS DESCRIPTIVES /CINTERVAL 95 /MISSING LISTWISE /NOTOTAL.
Resources	Processor Time		00:00:00.77
	Elapsed Time		00:00:00.65

Condition

Case Processing Summary

		Cases					
		Valid		Missing		Total	
	Condition	N	Percent	N	Percent	N	Percent
Fdbkafter	group	12	100.0%	0	0.0%	12	100.0%
	individual	11	100.0%	0	0.0%	11	100.0%

Descriptives

	Condition			Statistic	Std. Error
Fdbkafter	group	Mean		13.1667	1.30752
		95% Confidence Interval for Mean	Lower Bound	10.2888	
			Upper Bound	16.0445	
		5% Trimmed Mean		13.2963	
		Median		12.5000	
		Variance		20.515	
		Std. Deviation		4.52937	
		Minimum		4.00	
		Maximum		20.00	
		Range		16.00	

		Interquartile Range		6.50	
		Skewness		-.292	.637
		Kurtosis		.174	1.232
	individual	Mean		13.0000	1.34840
		95% Confidence Interval for Mean	Lower Bound	9.9956	
			Upper Bound	16.0044	
		5% Trimmed Mean		12.9444	
		Median		12.0000	
		Variance		20.000	
		Std. Deviation		4.47214	
		Minimum		7.00	
		Maximum		20.00	
		Range		13.00	
		Interquartile Range		7.00	
		Skewness		.394	.661
		Kurtosis		-.885	1.279

Tests of Normality

	Condition	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Fdbkafter	group	.181	12	.200*	.950	12	.640
	individual	.134	11	.200*	.938	11	.497

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Fdbkafter

Histograms

Histogram

for Condition= group

Mean = 13.17
Std. Dev. = 4.529
N = 12

Fdbkafter

Histogram

for Condition= individual

Mean = 13.00
Std. Dev. = 4.472
N = 11

Fdbkafter

Case Processing Summary

Condition	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent

	Condition						
Concafter	group	12	100.0%	0	0.0%	12	100.0%
	individual	11	100.0%	0	0.0%	11	100.0%

Descriptives

	Condition			Statistic	Std. Error
Concafter	group	Mean		16.6667	.89047
		95% Confidence Interval for Mean	Lower Bound	14.7068	
			Upper Bound	18.6266	
		5% Trimmed Mean		16.9074	
		Median		16.5000	
		Variance		9.515	
		Std. Deviation		3.08466	
		Minimum		9.00	
		Maximum		20.00	
		Range		11.00	
		Interquartile Range		3.50	
		Skewness		-1.319	.637
		Kurtosis		2.725	1.232
	individual	Mean		17.7273	.81006
		95% Confidence Interval for Mean	Lower Bound	15.9223	
			Upper Bound	19.5322	
		5% Trimmed Mean		17.8081	
		Median		20.0000	
		Variance		7.218	
		Std. Deviation		2.68667	
		Minimum		14.00	
		Maximum		20.00	
		Range		6.00	
		Interquartile Range		5.00	
		Skewness		-.402	.661
		Kurtosis		-1.988	1.279

Tests of Normality

	Condition	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Concafter	group	.248	12	.040	.860	12	.049
	individual	.347	11	.001	.745	11	.002

Concafter

Histograms

Histogram

for Condition= individual

— Normal

Mean = 17.73
Std. Dev. = 2.687
N = 11

Condition

Case Processing Summary

		Cases					
		Valid		Missing		Total	
	Condition	N	Percent	N	Percent	N	Percent
Contafter	group	12	100.0%	0	0.0%	12	100.0%
	individual	11	100.0%	0	0.0%	11	100.0%

Descriptives

	Condition		Statistic	Std. Error
Contafter	group	Mean	15.2500	1.07397

431

		95% Confidence Interval for Mean	Lower Bound	12.8862	
			Upper Bound	17.6138	
		5% Trimmed Mean		15.3889	
		Median		16.0000	
		Variance		13.841	
		Std. Deviation		3.72034	
		Minimum		8.00	
		Maximum		20.00	
		Range		12.00	
		Interquartile Range		5.25	
		Skewness		-.668	.637
		Kurtosis		-.142	1.232
	individual	Mean		16.2727	.99170
		95% Confidence Interval for Mean	Lower Bound	14.0631	
			Upper Bound	18.4824	
		5% Trimmed Mean		16.4141	
		Median		16.0000	
		Variance		10.818	
		Std. Deviation		3.28910	
		Minimum		10.00	
		Maximum		20.00	
		Range		10.00	
		Interquartile Range		6.00	
		Skewness		-.604	.661
		Kurtosis		-.256	1.279

Tests of Normality

	Condition	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Contafter	group	.163	12	.200[*]	.940	12	.499
	individual	.194	11	.200[*]	.918	11	.301

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Contafter

Histograms
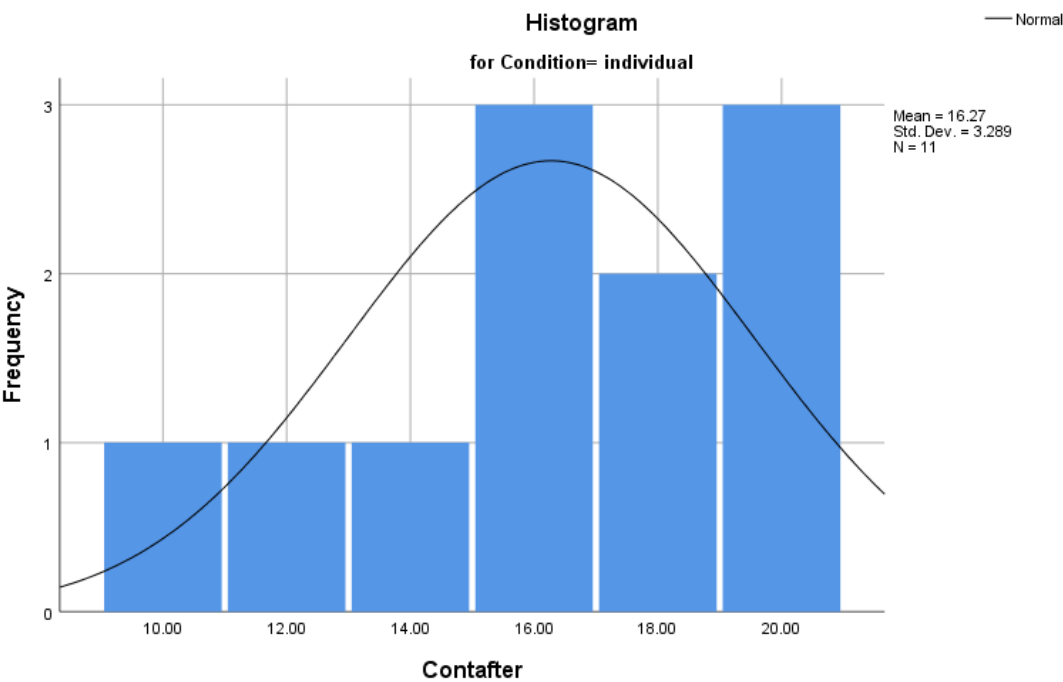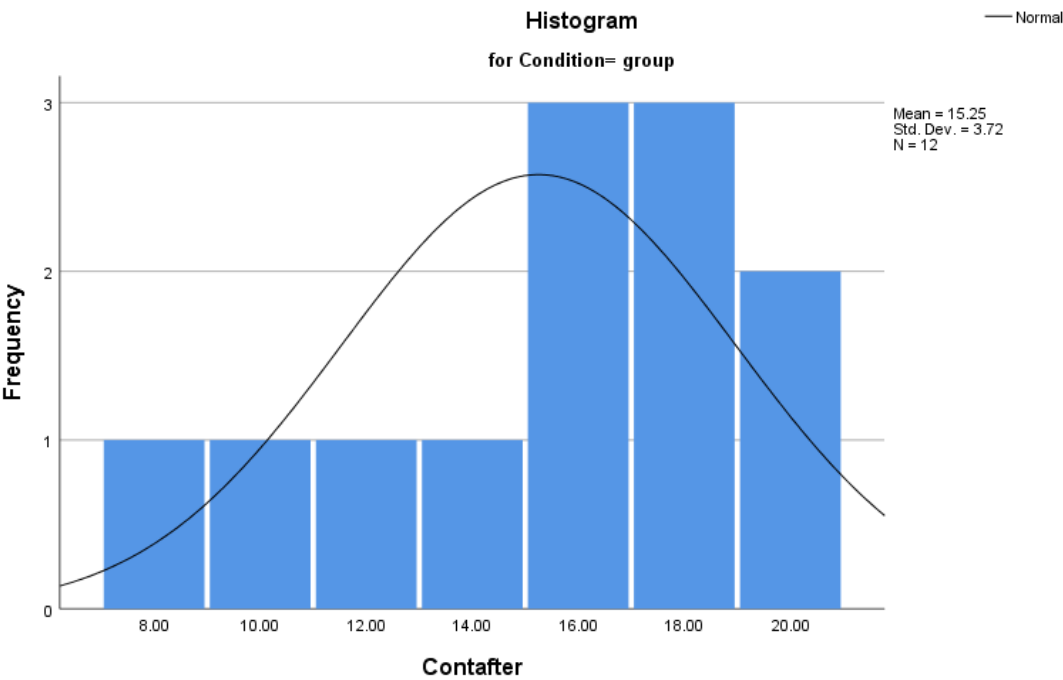
Histogram

for Condition= group

— Normal

Mean = 15.25
Std. Dev. = 3.72
N = 12

Histogram

for Condition= individual

— Normal

Mean = 16.27
Std. Dev. = 3.289
N = 11

Case Processing Summary

| | | Cases |
| | | \multicolumn{2}{c}{Valid} | \multicolumn{2}{c}{Missing} | \multicolumn{2}{c}{Total} |
	Condition	N	Percent	N	Percent	N	Percent
Lossafter	group	12	100.0%	0	0.0%	12	100.0%
	individual	11	100.0%	0	0.0%	11	100.0%

Descriptives

	Condition			Statistic	Std. Error
Lossafter	group	Mean		15.2500	1.38238
		95% Confidence Interval for Mean	Lower Bound	12.2074	
			Upper Bound	18.2926	
		5% Trimmed Mean		15.4444	
		Median		17.5000	
		Variance		22.932	
		Std. Deviation		4.78872	
		Minimum		7.00	
		Maximum		20.00	
		Range		13.00	
		Interquartile Range		7.75	
		Skewness		-.662	.637
		Kurtosis		-1.176	1.232
	individual	Mean		14.1818	1.77773
		95% Confidence Interval for Mean	Lower Bound	10.2208	
			Upper Bound	18.1429	
		5% Trimmed Mean		14.3687	
		Median		14.0000	
		Variance		34.764	
		Std. Deviation		5.89607	
		Minimum		5.00	
		Maximum		20.00	
		Range		15.00	
		Interquartile Range		12.00	
		Skewness		-.291	.661
		Kurtosis		-1.759	1.279

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Condition	Statistic	df	Sig.	Statistic	df	Sig.
Lossafter	group	.226	12	.092	.854	12	.042
	individual	.248	11	.058	.840	11	.031

a. Lilliefors Significance Correction

Lossafter

Histograms
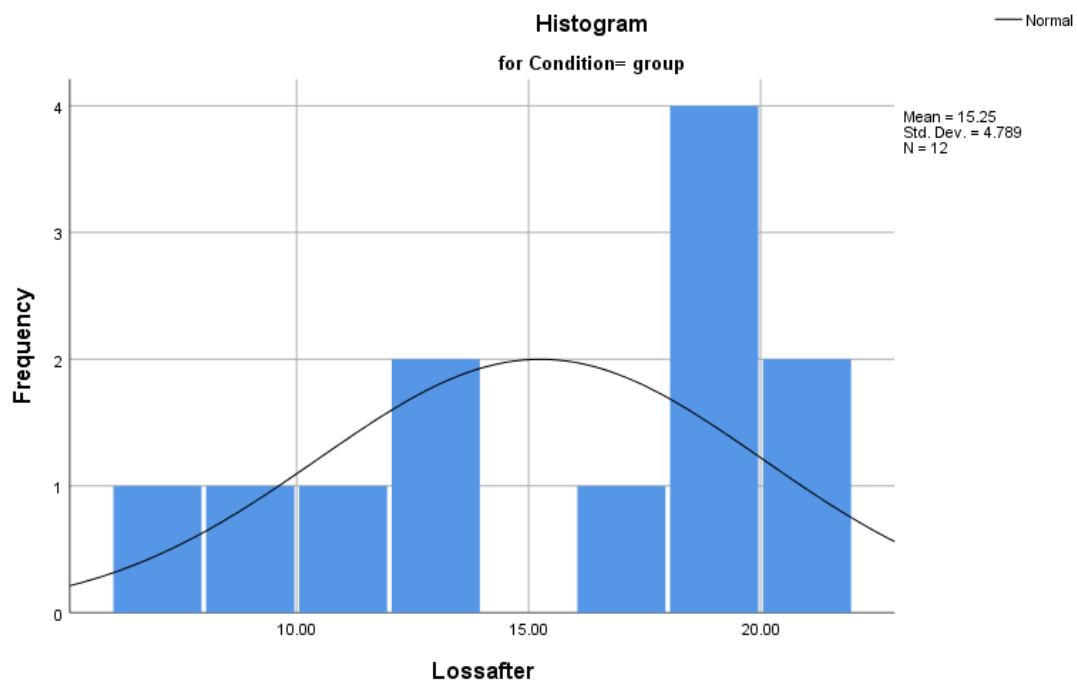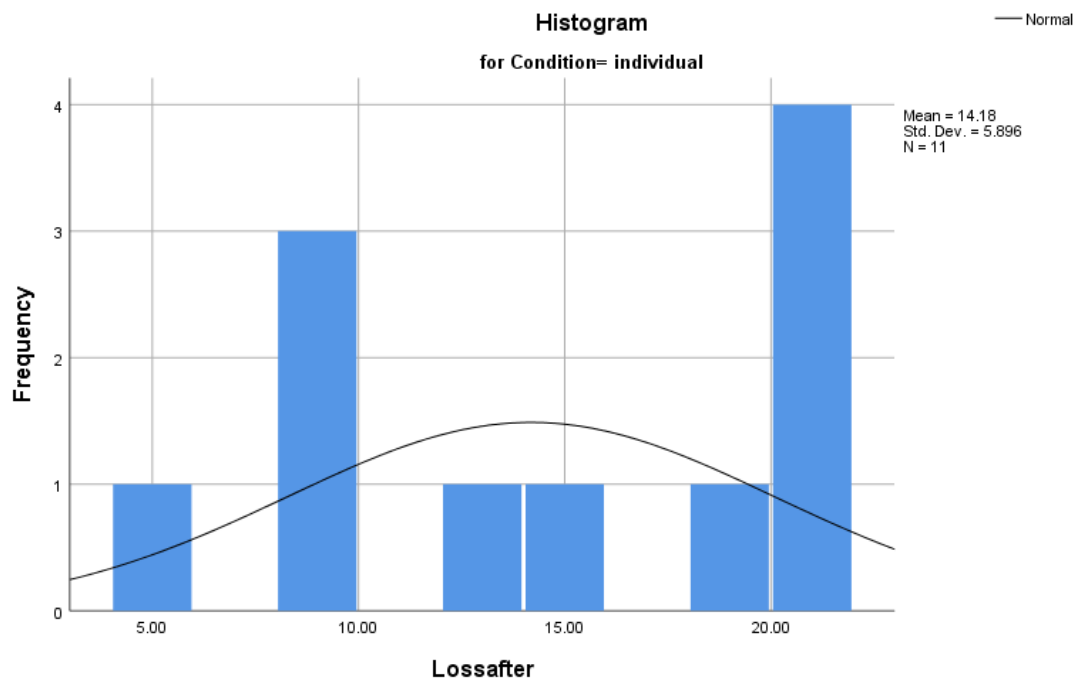
Histogram for Condition= group

Mean = 15.25
Std. Dev. = 4.789
N = 12

Histogram

for Condition= individual

Mean = 14.18
Std. Dev. = 5.896
N = 11

Case Processing Summary

		Cases					
		Valid		Missing		Total	
	Condition	N	Percent	N	Percent	N	Percent
Tranafter	group	12	100.0%	0	0.0%	12	100.0%
	individual	11	100.0%	0	0.0%	11	100.0%

Descriptives

	Condition			Statistic	Std. Error
Tranafter	group	Mean		12.0000	1.24316
		95% Confidence Interval for Mean	Lower Bound	9.2638	
			Upper Bound	14.7362	
		5% Trimmed Mean		12.0556	
		Median		12.0000	
		Variance		18.545	
		Std. Deviation		4.30644	
		Minimum		4.00	
		Maximum		19.00	
		Range		15.00	

436

		Interquartile Range	5.25	
		Skewness	-.525	.637
		Kurtosis	.294	1.232
	individual	Mean	12.5455	1.56881
		95% Confidence Interval for Mean — Lower Bound	9.0499	
		95% Confidence Interval for Mean — Upper Bound	16.0410	
		5% Trimmed Mean	12.6061	
		Median	13.0000	
		Variance	27.073	
		Std. Deviation	5.20315	
		Minimum	4.00	
		Maximum	20.00	
		Range	16.00	
		Interquartile Range	7.00	
		Skewness	-.547	.661
		Kurtosis	-.393	1.279

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Condition	Statistic	df	Sig.	Statistic	df	Sig.
Tranafter	group	.167	12	.200[*]	.940	12	.495
	individual	.186	11	.200[*]	.933	11	.446

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Tranafter
Histograms
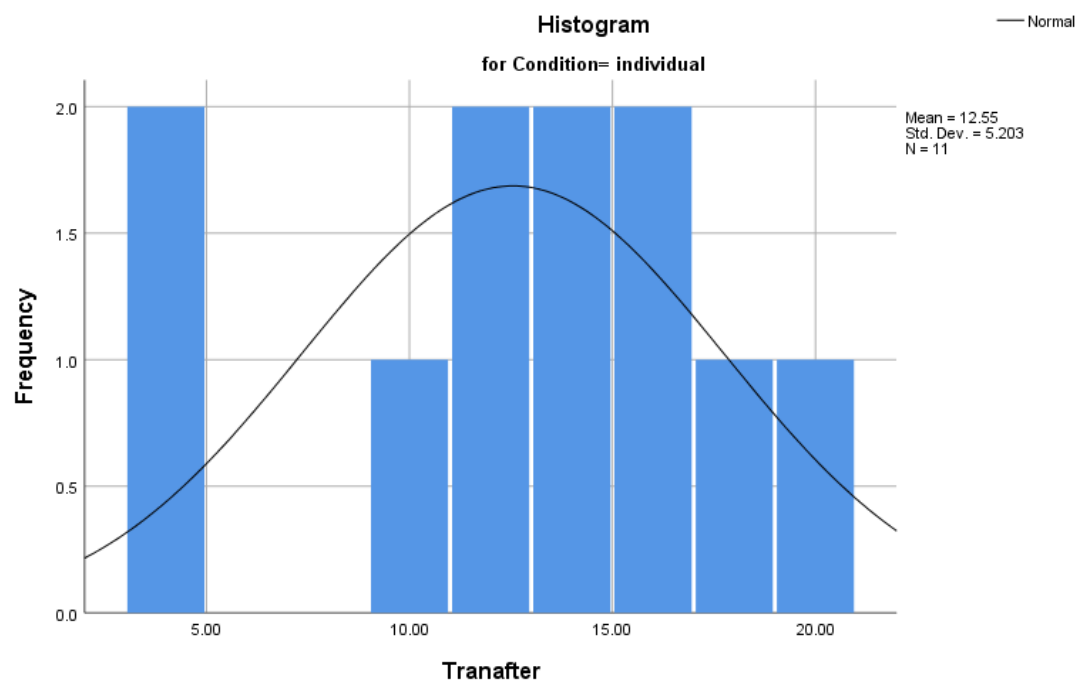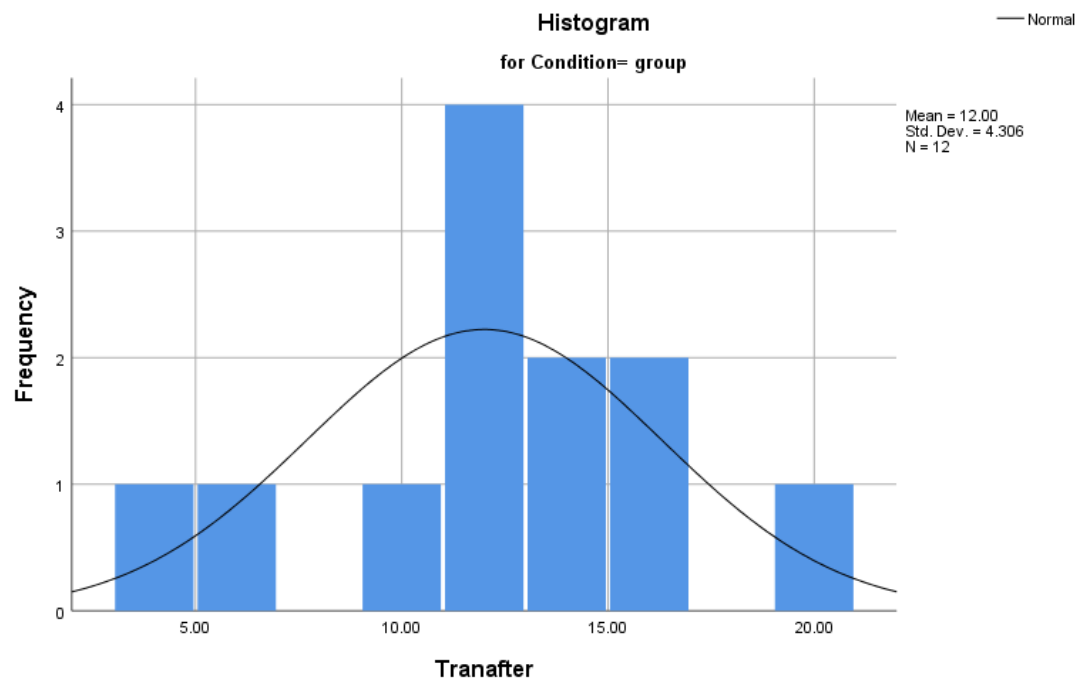
Histogram

for Condition= group

Mean = 12.00
Std. Dev. = 4.306
N = 12

Histogram

for Condition= individual

Mean = 12.55
Std. Dev. = 5.203
N = 11

Case Processing Summary

		Cases					
		Valid		Missing		Total	
	Condition	N	Percent	N	Percent	N	Percent
Enjyafter	group	12	100.0%	0	0.0%	12	100.0%

				Statistic	Std. Error
individual		11	100.0%	0	0.0%	11	100.0%

(continued)

Descriptives

	Condition			Statistic	Std. Error
Enjyafter	group	Mean		15.5833	.98056
		95% Confidence Interval for Mean	Lower Bound	13.4251	
			Upper Bound	17.7415	
		5% Trimmed Mean		15.6481	
		Median		16.5000	
		Variance		11.538	
		Std. Deviation		3.39675	
		Minimum		10.00	
		Maximum		20.00	
		Range		10.00	
		Interquartile Range		6.50	
		Skewness		-.288	.637
		Kurtosis		-1.529	1.232
	individual	Mean		15.9091	1.18670
		95% Confidence Interval for Mean	Lower Bound	13.2650	
			Upper Bound	18.5532	
		5% Trimmed Mean		16.1212	
		Median		16.0000	
		Variance		15.491	
		Std. Deviation		3.93585	
		Minimum		8.00	
		Maximum		20.00	
		Range		12.00	
		Interquartile Range		6.00	
		Skewness		-.783	.661
		Kurtosis		.000	1.279

Tests of Normality

	Condition	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Enjyafter	group	.193	12	.200[*]	.907	12	.197
	individual	.149	11	.200[*]	.906	11	.218

*. This is a lower bound of the true significance.

439

Enjyafter

Histograms

Histogram
for Condition= group

Mean = 15.58
Std. Dev. = 3.397
N = 12

Histogram

for Condition= individual

Mean = 15.91
Std. Dev. = 3.936
N = 11

Normal
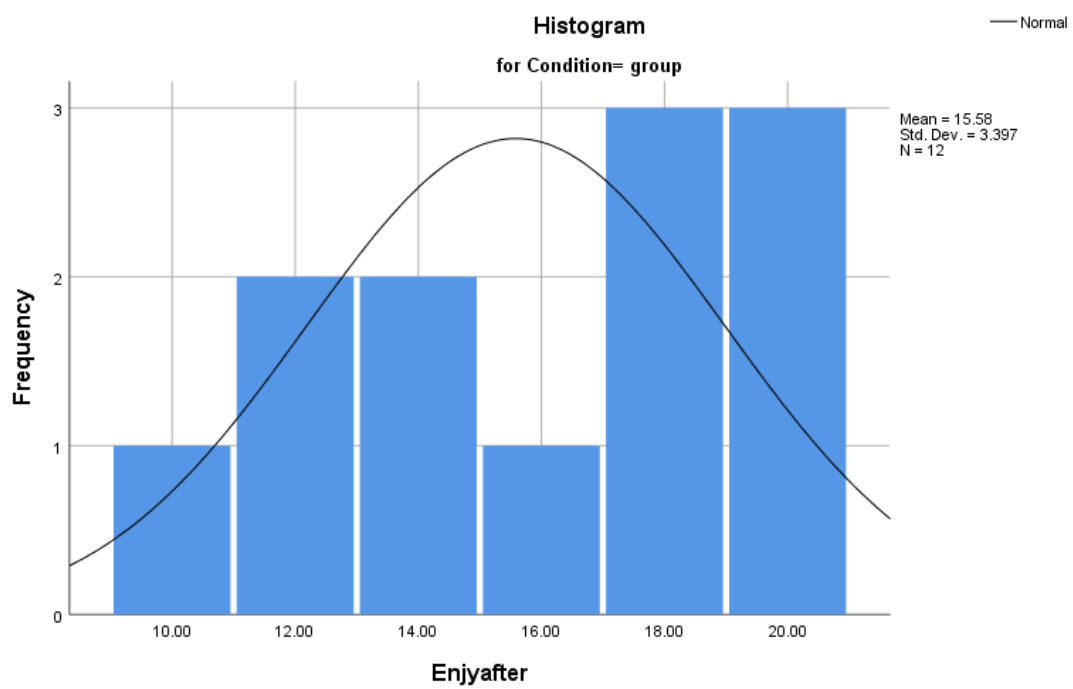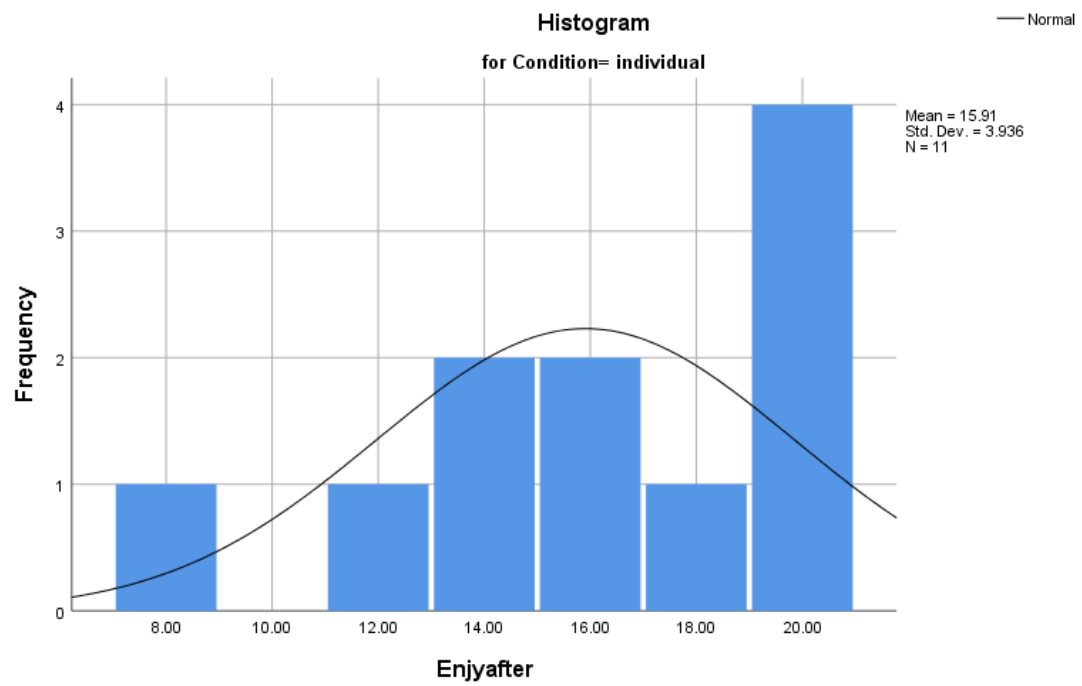
Appendix W: Descriptive Statistics for Study 4 – before and after creating

Condition	Median	Interquartile Range	N
Flow Before Creating	126.22	20.92	23
Flow After Creating	130.30	26.28	23
Challenge – Skill Balance Before	13.00	4.00	23
Challenge – Skill Balance After	14.00	8.00	23
Action-Awareness Merging Before	16.00	6.00	23
Action-Awareness Merging After	14.00	9.00	23
Clear Goals Before	17.00	5.00	23
Clear Goals After	13.00	7.00	23
Unambiguous Feedback Before	14.00	4.00	23
Unambiguous Feedback After	12.00	7.00	23
Concentration on Task Before	16.00	7.00	23
Concentration on Task After	17.00	4.00	23
Paradox of Control Before	17.00	5.00	23
Paradox of Control After	16.00	4.00	23
Loss of Self-Conciousness Before	14.00	6.00	23
Loss of Self-Conciousness After	17.00	11.00	23
Transformation of Time Before	10.00	6.00	23

Transformation of Time After	12.00	6.00	23
Autotelic Experience Before	12.00	5.00	23
Autotelic Experience After	16.00	6.00	23

Appendix X: Descriptive Statistics for Flow Scores – Individual vs. Group

Flow Constructs in Individual vs. Group Conditions	Median	Interquartile Range	*n*
FlowSUM Group	131.00	37.75	12
FlowSUM Individual	135.00	56.00	11
CHAL Group	14.00	5.75	12
CHAL Individual	15.00	9.00	11
ACT Group	15.00	7.00	12
ACT Individual	14.00	12.00	11
GOAL Group	14.00	7.00	12
GOAL Individual	13.00	10.00	11
FDBK Group	12.50	6.50	12
FDBK Individual	12.00	7.00	11
CONC Group	16.50	3.50	12
CONC Individual	20.00	5.00	11
CONT Group	16.00	5.25	12
CONT Individual	16.00	6.00	11
LOSS Group	17.50	7.75	12
LOSS Individual	14.00	12.00	11
TRAN Group	12.00	5.25	12
TRAN Individual	13.00	7.00	11
ENJY Group	16.50	6.50	12

ENJY Individual	16.00	6.00	11

Table 18. Shapiro Wilks Test Results for Stress Constructs

Stress Constructs	Shapiro Wilks Statistical Result
Engagement Difference Before	W (24) = 0.97, p= 0.54
Engagement Difference After	**W (24) = 0.88, p = 0.01**
Distress Difference Before	**W (24) = 0.83, p = 0.00**
Distress Difference After	**W (24) = 0.84, p = 0.00**
Worry Difference Before	W (24) = 0.97, p = 0.77
Worry Difference After	W (24) = 0.96, p = 0.47

Stress subscales before and after creating	Median	Interquartile Range	*n*
Engagement difference before	-1.50	7.00	24
Engagement difference after	-2.00	5.75	24
Distress difference before	1.00	2.75	24
Distress difference after	0.00	2.75	24
Worry Difference before	0.50	8.50	24
Worry Difference after	2.00	5.75	24

Stress subscales in the Individual versus Group Condition	Median	Interquartile Range	*n*
Engagement difference Group	-2.50	5.50	12
Engagement difference Individual	-0.50	6.50	12
Worry difference Group	4.50	5.25	12
Worry Difference Individual	0.00	6.25	12
Distress Difference Group	0.00	3.25	12
Distress difference Individual	0.00	3.50	12

IF U DON'T KNOW
THE GAME THEN
UR STILL PART
OF IT
BECAUSE OUT ON
THE STREET IT'S
STRANGE TO SEE THE
SHOW
KNOWIN FULL WELL THAT
UR ON THE RANGE
DODGE THE BULLETS
OR CARRY THE GUN
THE CHOICE IS URS

"I won't stop at the roof..."

The questions for the IPA study will fall under the following headings with potential questions depending on where the participant takes their reflections:

Understanding of Art
- In your own words, define art.
- In your own words, describe the process of art-making
- As an artist how would you describe the experience of creating art?

Experiences creating individually
- What is the experience like of working on your art alone?
- Can you describe how you feel while you are creating?

Experiences creating in groups
- What is the experience like of working on your art in groups?
- Can you describe how you felt working on a collaborative piece?
- How did you feel toward your co-artists during and after creating?

Experiences of art in conflict or stressful situations
- Do you have any reflections on how you feel about conflict or stress in your life or in the world when you are creating your art?
- Can you describe any experiences of artwork, whether individually or collaboratively created during or as a result of conflict?

Experiences of Flow while creating
- How would you describe your level of immersion or engagement while creating art?

Appendix AD: Themes and Sub-Themes from Participants in IPA Study

Themes from Isaac Interview	Themes from Jeffrey Interview	Themes from Jennifer Interview	Themes from Danielle Interview	Themes from Mary Interview	Themes from Matthew Interview
Identifies as an artist – Painting as a medium	Identifies as an artist – Singing as a medium	Identifies as an artist – Painting, photography, film-making as medium	Identifies as a poet and musician	Identifies as an actress and writer	Identifies as a musician and singer
What is art	Definitions of art	Definitions of art	What is art	What is art	What is art
-Too big to pinpoint -Creating process – fluid, fresh, impulsive -Organic approach -Art as intentional and unintentional -You know great art when you see it/experience it -Organized, relaxed environment as part of the artwork.	-Art as an expression of feeling -Expressing when you can't find the words -Doesn't fit into a box -Art as positive -Art as discipline -Art as "me" – " made me who I am"	-Art as expressing -Art as exploring -Art as releasing feelings -Art as spontaneous "not knowing what I want to paint" -Art as escapism -Art as freedom	Art as "me" Art as heart Art as communication Art as communicating emotion beautifully – even negative emotions Art as release for fear	Art as medium of effective expression Art inclusive of creator and receiver, incomplete without both Art as communication Art as free/liberating Art as empowerment Art as freedom from fear Art as controlling emotions Art helping to understand fear and weaknesses	Art can come from anywhere (can't sing)
Art can come from anyone anywhere (People who have engaged in collab creating) -People with little access to culture have worked on collaborative pieces -People who have never made art before -Lost children looking for an opportunity to cause trouble -People in desperate situations	Art can come from anywhere -No formal training -Learned through trying	-No correct or incorrect way Art as open safe space for all Art can come from anywhere -Everyone as artist regardless of experience			
Context of collaborative creating	Contexts of collaborative creating	Contexts for collaborative art -Man as xx	Context for collaboration	Context for collaboration -Play	Context for collaborative art Giving a platform for the homeless

-Gentrification – Long standing community vs. Incoming outsider community -Students from different schools – Elite art vs Community art -Clash of cultures -Not understanding the differences in approach of the other group of kids -Never got to like each other but working together -Tension between immigrants and long standing English community -Physical clashes -Clear problems of marginalization that are difficult to break through	-Keeping people off the streets	-Film and media	-Giving a voice to others (expressing the experience of a person with a disability)		Showing a different side of homelessness Arts used to introduce human rights Giving opporunities for homeless to get involved in arts Refugee vs working class white Jews and Palestines playing together – not discussing problems – amazing to watch Homelessness and police
Facilitating collaborative creating -Relaxed atmosphere -Chatting, phones, listening to music -Making cups of tea like a family -Organic -Openness -Done in the interest of the people involved (intention) -Unselfishly making a difference (facilitator)	Facilitating collaborative creating -Understanding partners voice -Balance/Equality -Less time, time conscious, ensuring simple enough for everyone -Openness and creativity	Facilitating Collaborative Creating -Relaxed atmosphere -People having fun -Theatre as a safe space -Focus on the art – everything else left behind -Place of expression	Facilitating Collaborative Creating -Depends on feelings/situation – relaxed -Just start writing and go -Free, unstructured process of creating -Flowing -Relaxed conversation/atmosphere sets precedence for more serious things -Trust developed through consistency – creating together	Facilitating Collaborative Creating -Flowing, Spontaneous, Impulsive	Facilitating Collaborative Creating -Collaborative arts as a safe space -Practice together consistently -Trust and a safe space needed for collaborative creating -Environment of trust needed to facilitate arts -Facilitating an environment where people feel like they can do the task/art -Reachable/esteemable but challenging goal

-Original and challenging approach -Non-standard -Understand the needs of people involved -Not asserting parameters -People free to work as they please -Openess -Appetite for new things -Willingness to let go of preconceptions -Try to have fun					-Artists believe in the project -Collaborative art providing a space to be a creative person not identified by issue – leaving that stuff at the door
During collaborative creating -Burst out of a bubble -Open to other people's ideas -Channelling each other's thoughts -More than a sum of parts -Transcends -Everyone latches on to same idea -Product emerging without awareness that it is emerging -Collaboration process described as magic	During Collaborative Creating -More conscious of creativity -Giving a small piece of who I am -Building relationships through expressing with others -Freedom to take risks when you understand your partner -More focus in group setting to get point across	During Collaborative Creating -Blending of strengths and weaknesses of group members -Group roles -Balance of strengths and weaknesses -Produces better product than individual -Group creating pulling on everyone's strengths -Covers individual weakness -Freeing -Learning from others	During Collaborative Creating -Different media facilitating different processes -Conversations build rapport and trust as part of the creating process -Salient identities or mini-groups being formed in the creating process -Based on trust -Open-mindedness -Good feeling when you trust the team -Nervous when performing with someone you don't trust	During Collaborative Creating -Transforming of energy into art/dance -Art providing a common goal – spread the message effectively -Giving feedback and reactions during rehearsals -People are immersed in the creating process -Awed by each others acting	During Collaborative Creating -Art as communication/expressing without words -Consistency and continuity of practicing providing dependency and confidence -Art functions to access something deep within us

-Able to translate energy into creative energy -Very enjoyable -Unpredictable Accidental/Surprising outcomes (examples included – red heart lady) -Things just mix together -Unclear what is being created -Transcendence of energy	-Positive instead of negative expression -Getting to know oneself -Building relationships	-Admires working with others -Similar passions -In awe of others ideas -Exploring other ways to create -Mindset of working toward end goal -Respecting each other even if not getting along -Invested in a great production	regularly -Standard matched with partner -Blending brokenness together -Intimacy of blending testimonies -Sharing feelings -Crying together -Processing emotions while expressing with the other -Collaborative creating as mini-relationship where artists have to work together -Intimacy -Being on the same spiritual level	-Learning from each other - Art providing common goal -Humility and Vulnerability during creating -Involving a struggle Self-development	
		Conflict during collaborative creating			
Conflict arising during collaborative creating -Exposure to each other's ideas -Disagreeing on what art is – all came out on the canvas	Conflict arising during collaborative creating -Differences in creative process causing conflict -Creative process also releasing conflict -Emotion from conflict strengthening expression through artform	-Drive and passion causing conflict -Not able to past one's own thoughts	Conflict in collaborative creating -Occasions where participants don't click -Working toward the greater good "Remember why you are up there" -Spreading a message to build other people -Petty issues don't matter when message through creating builds others -Issues not swept under rug but communicated -Collaborative art opening door to conversation	Conflict in collaborative creating -Transforming ugly feelings into art through acting - Negative energy coming out in positive way -Not caring about conflict - Art causing shift in focus form the conflict Art causing point of view to alter Positive behaviour toward each	

			-Coming together in spite of conflict after seeing other strengths through art -Goal greater than "us" -"Greater good" in collaborative art the goal -"I remember having to humble myself" -Goal to spread a message to build other people -Art expressing feelings of conflict -Art as de-escalating the issue - Art as controversial – expressing controversial issues -Conflict inevitable in the creating process -Art is conflict resolution -Art as ability to create world peace -Not everyone will agree with message due to personal nature of art	other after successful performance Art as processing in a healthy way Anger and conflict translated into art -Art (play) continues in spite of conflict - More time to create would aid in healing/solving issues -Art and time facilitating the breaking of tension	
Benefits/successful outcomes of collaborative art -Product of collaborative art unexpected -End result often a surprise -People coming off the street to look at it -People hearing about it -People being together and making art together -Clashing of different people who are coming together to create made it "great" -Connect to people	Benefits/successful outcomes of collaborative art Changes/Effects of collaborative creating Change in preconceived notions	Benefits/successful outcomes of collaborative art -Two way communication -Open-mindedness -Drive and passion -Openmindedness	Benefits/successful outcomes of collaborative art -Impact – does it empower? Change someone's life? -Reaction from receiver/audience -Appropriate reaction to art	Benefits/successful outcomes of collaborative art -Appreciated -Understood -Alters or enhances the receivers life -Openness to people with difference Establishing of goal	Benefits/successful outcomes of collaborative arts (in the homelessness sector. -Arts bringing down barriers between people -Wellbeing -Resilience -Agency -Knowledge and Skills -Isolation is a real problem that collaborative arts helps -People come to creating groups to be with other people, be with a supportive group -Creating together on stage potentially

			459		playing out in society? -Separated groups coming together to sing – amazing experience -Politicians should use collaborative arts to promote community cohesion -Collaborative arts changing perspectives
"Unsuccesful" collaborative art -Defined, patronizing -Dumbed down, simple -No challenge -Done for PR purposes (intention) Safe/unchallenging projects -Boring when people don't know what to do Lack of communication -Different intentions					-Collaborative arts changing negative identity to a positive identity -Sympathy vs change in perception -Public love and respect for collaborative homeless art – respect for the courage to share stories -Spreading awareness of homelessness -Reminded that your contributions makes others happy -Improved confidence -Feeling present – going out more -Getting in touch with friends -More courage - Unexpected outcomes of group collaboration (see example)
		Wellbeing and collaborative creating -Art as freeing -Art as calming -Art helping with anxiety -Takes me out of stressful environment -No stressful thoughts while creating (if just like for the next hour) -Unwind and destress -Release of emotions rather			-Collaborative arts facilitating a sharing of identity - Music as a tool for uniting people with different identities - Music changing the narrative - Where there is pain there is togetherness and love - Homeless and police performaing together – development of a better relationship – evidence of improved relationship
Wellbeing and collaborative creating -Confidence -Belief in ones ability to contribute to society					

Personal/Individual art experience/description	Individual creating	Individual Creating	Wellbeing and collaborative creating	Individual experiences creating	Shared Goal of performing well - Everyone is creative, helping each other
- Artists set in their own ways - Own expectations - Working in their own bubble	-Express selfishly -Own feelings -In own style and voice -More time to explore	-Everything is her own - Pleasing, own ideas, done this myself - Freeing - No judgement - Trapped in own bubble - All about me	than build up of emotions -Art saved her life -Art gives ability to release. -Art gives opportunity to think -Art helping to understand oneself -Challenging thoughts , being self-reflective -Talking about uncomfortable things through art -Therapeutic for both artist and receiver -Artist and receiver sharing feelings -Creating as closure to relationships -Art essential for wellness -Art crucial to wellbeing -Sharing experience -*Developing trust of others through consistent creating together Individual creating -Self-responsibility -Artist has to be strong/confident	-Surprise and happiness from creating well-received work -Happy when people get the message Collaborative experiences	Wellbeing and collaborative creating -Singing combines mental and physical well-being -Singing feels good Art important for wellbeing Using the arts for mental health with the homeless

Transcript

ISAAC INTERVIEW

Interviewer: Awesome. Just to ask you a couple of questions. Based on what I saw online, you are an artist as well, aren't you?

Respondent: Yes, I'm an artist. I have my own practice which is mostly just painting. Then I have been running this social art project that has been going by the name of International Collaborative Drawing Project. I think what you saw on the left side.

Identifies as artist
Medium - painting
Runs social art project

Interviewer: Yes.

Respondent: We started that in 2010 in London.

Interviewer: Amazing.

Respondent: Then our base moved to Manchester. We started working in the US, all over Europe.

Interviewer: Amazing.

Respondent: We were going to work in Canada, but that fell apart. I might try and pick that up.

Interviewer: Maybe start in Toronto because Toronto is a great place for--

Respondent: It was going to start in Toronto with-- There's a program, I don't know if you know it, called Draw By Night.

Interviewer: Have I heard of them? No.

Respondent: It's quite popular in Toronto. I think the original was started in Germany and then this girl, **[unintelligible 00:01:18]**, started in Toronto. We were going to work with

them, but I think we initially had some creative differences because-

Interviewer: Got it.

Respondent: -they weren't very socially driven. They were mostly a project for creative professionals to come network and have fun together. Whereas our project was very strongly socially driven. It was rooted in this idea that art can come from anywhere from anyone. We would go out to all these groups of people. It wasn't always underprivileged communities. Sometimes we go to very affluent areas.

We weren't focused on any particular groups of people. We were just interested to see how everyone responds to this prompt which was usually, "Let's all get together and draw together." We did some other things, we did some digital art and some video and performance and sculpture, which you might have seen somewhere. Mostly it was focused on drawing. I'm sorry for that form of a tangent.

Interviewer: Drawing was the media. No, that's great. [laughs]

Respondent: I forgot the original question.

Interviewer: [laughs] Maybe actually what I'll ask you is, did you have an experience? What started this movement?

Respondent: The Collaborative-?

Interviewer: Yes.

Respondent: -approach? I've always been interested in collaboration ever since I was in my teens. The reason I

[Handwritten margin notes:]
Socially driven art
Art can come from anyone /anywhere.

Interested in response to prompt to create together

Always been interested in collaboration

File name: IL Interview.m4a

was interested in collaboration is because with your own personal practice, a lot of artists are quite set in their ways and you have your own expecta-- Often times, not always, artists will have their own expectations, quite a clear vision of-- There's almost like a bubble around the artists and they're working in that bubble. With collaboration, you burst out of that bubble, and you open yourself up to all of these other people's ideas. What's the word? You're channeling.

Everyone is channeling-- They're channeling each other's thoughts. You often come up with a product that's unexpected. I always like to say it ends up being more than the sum of its parts. It kind of transcends. My experience always with collaborative art is you're working, and oftentimes, when it really works, everyone latches on to the same idea. Somehow, this product emerges, whether it's a big drawing or a canvas or a video or whatever. It emerges often without people realizing that it's emerging, and just kind of creates itself. It is always a surprise for everyone. There is that kid of magic with collaboration.

That's why I've always been interested in a collaborative approach. With this particular drawing project, it started in London like I said. I was living in a council estate. I wasn't part of the council estate, but essentially we had this funny little house right smack in the middle of a council estate. We had a lot of neighbors. It was a very lively kind of community. It was an interesting-- Have you been to Peckham in London?

Interviewer: I think I've maybe driven through there. [chuckles]

Handwritten annotations (right column):

Individual/personal art.
- Artists set in their own ways
- Own expectations
- Working in their own bubble

Collaborative art
- Burst out of a bubble
- Open to other people's ideas
- Channeling each others thoughts
- Product of collaborative art often unexpected
- More than a sum of parts — transcends.

Personal experience of collaborative art
- Everyone latches on to same idea
- A product emerges often without awareness that it is emerging
- End result often a surprise
- Collaboration process described as magic

Respondent: It was in Peckham, right around the time when Peckham was becoming gentrified. It was 2010. There was this incoming outsider community that was bringing all these wealth and changing Peckham, and then there was this longstanding community. That's who we were working with. There were a lot of artists, a lot of artists coming in. You know how gentrification goes.

Interviewer: Yes, absolutely.

Respondent: Because we found ourselves in the middle of this council estate-- I was living with three other artists in this house, and we just naturally started working with our neighbors here, most of whom were not artists, they had very minimal contact with culture of any sort. They had this thing where they only went north of the river once a year to do their Christmas shopping. They never ventured into central London. It was this very in a way a close community, but somehow they loved us. We really bonded together. That's who we started making the original drawings and we did performances.

They had us in when they would do their-- They had bingo nights and Halloween parties and Christmas parties and stuff. They'd call us in to do their decorations. We would get DJs in. It was great. It was a very organic partnership in that way. Because of the success of that, I became interested, "Well, what would happen if I tried to take this idea elsewhere?" That's when I started to grow the project. It was a process of connecting to different art organizations, community centers. There was a lot of public funding for this work--

Interviewer: Brilliant.

Context for collaboration - Gentrification
- Incoming outsider community
vs
- long standing community

How the project started.

Transcript

Respondent: -back then in England, not so much anymore, unfortunately. That's probably why my project had to leave England eventually just because we couldn't get the funding that we were getting. That's how it started.

Interviewer: How it started, yes. Can you give me an example? You gave me an example before, but if you could maybe give me an example of where you saw or you were a part of two communities or a group of people creating together and what was happening while they were creating or while you were creating as well if you were involved?

Respondent: I'll tell you about this project that I did in London in Archway in 2012, which was one of the first bigger commissions that we got. It was part of the project called A Million Minutes which is a social project that was run by Islington Council and Central Saint Martins, the art school, where they were doing all kinds of things. What they asked us to do is take over an empty shop front, and we basically had-- It was a month-long drawing marathon.

It was great because I had students from Central Saint Martins helping me as volunteers and also from City & Islington College, two very different universities. One is more like-- I don't know exactly, but the Central Saint Martin is this elite art school, and then City & Islington is more of a community art

Interviewer: Got it.

Respondent: -college kind of place. I don't know, the equivalent of what in America would be a community college, a bit more blue-collar. I have volunteer

[handwritten note:] Example of collaborative art 'Month long drawing experience'

[handwritten note:] Students from different schools of different cultures. Elite art vs. community art

File name: IL Interview.m4a

Transcript

students from each university, even in that clash of cultures, it was really interesting just to observe where different people were coming from. I don't think each group really ever got to like each other but they were there working together.

They were exposed to each other's ideas. The City & Islington kids could not understand the conceptual approach of Saint Martins, and Saint Martins kids, they hated the fact that all the City & Islington kids were into video games and doing cartoons. They're incredible drawers, very, very skilled. A lot of them came from illustration courses. They're all studying art but from very different perspectives.

I was in the middle trying to be, "Well--" One group would be like, "Well, that's not art." Then the other group would be like, "Well, that's just silly art." I'm like, "Well, let's think about how all of these forms of art kind of work together." It all came out on the canvases. At the same time, we have over 400 community members just coming in off the street often because everyone could see what we were doing. You can see this project, I think it's one of the ones that's featured on the website.

Interviewer: Okay, brilliant.

Respondent: You can see pictures of it. Because it was so visible, we had people coming in just off the street or people that had heard about it. It was a very successful project. I remember, we even had people who had been evicted from their homes who would come. It was wintertime, so it was cold. It was a place where a lot of people-- We even had homeless people coming in where

Handwritten margin notes:
- clash of cultures
- Never got to like each other but worked together.
- Exposed to each other's ideas
- Could not understand the differences in approach of the 'other'.

Disagreeing on what 'art' is
"It all came out on the canvases"

IMPACT

Successful project
People coming off the street to look at it
- People hearing about it.

focus

people could come and it was a warm place where people could be together and make art together. It was a clashing of different people. I think that's what made it great. It was very interesting. I hope I'm answering your question well.

Interviewer: Yes, definitely.

Respondent: To see these two different groups of students clash-- It was a total culture clash.

Interviewer: What happened? What would happen while they were creating, would they communicate with each other? Would it be more like everyone just puts their ideas on the canvas? Would there be any interaction between them or was it all coming out in the art?

Respondent: Absolutely. It was very relaxed. Most of my projects have been a very relaxed atmosphere where people are chatting. Some people would be on their phones or listening to music. I try to encourage whatever makes people happy. My approach is to try to create a welcoming environment where everyone can feel-- Even if they've never supposedly made art before in their life. I think everyone has made art just by being, you're kind of an artist, but people don't realize that. I try to make it open for everyone. Most of the time people are chatting, drawing at the same time, making cups of tea like a family.

Interviewer: Yes, so very loose structure?

Respondent: Yes.

Interviewer: You just come in and-- You said before that they never really got a chance to like each other. Do you think there was any change in maybe their

[Handwritten margin notes:]

People would be together and make art together. 'clashing of different people'. This coming together of all these different people made it (great)

Culture clash

Environment facilitating collaborative art
- Relaxed, encourages what makes people happy
Chatting, phones, listening to music
"Making cups of tea like a family"

File name: IL Interview.m4a

perceptions of each other or how they communicated with each other afterward, after that experience?

Respondent: I would say there was a little bit of change. I've kept in touch with some of these students through the years. I don't think that spending a couple of weeks together is really enough time to change someone's perspective in life. It's not like they were against each other or really fighting. I think they just had very different views. I don't think that really ever changed.

Different views, very little change

From what I know from all the students in Saint Martins, they've gone on and are working. Some of them are working in fashion, design and different fields. From what I know from the City & Islington students, I think one of them is an illustrator or works with video game design to some extent. Another one I know was getting some private commissions to do graffiti type murals. That's about all I know, but still quite different fields. Basically, the Saint Martins kids, we're doing what is more commonly considered high art. The other kids from City & Islington are doing more like lowbrow types of art.

Difference between groups

Interviewer: What for you was most valuable out of that experience? Why would you want to do something like that again?

Respondent: Always, with this project, it's about bringing cultures together, different cultures, and trying to make some connection. Sometimes it's more successful, sometimes it's less successful. I remember maybe one example that was very successful was in a project that I did in and around Doncaster. We worked in several

Reason for collaborative creating
- Bringing different cultures together
- Making a connection

Example of a successful project

different suburbs of Doncaster. I remember there was a lot of tension.

This was right before the Brexit vote and there was a lot of tension between the long-standing English community and some of the immigrants who were coming in. To the point where there were physical clashes between the two groups. We had workshops where everyone came together. I didn't see any animosity. It seemed like when I was drawing on the floor, we had other things that we're doing. We had some other artists that were doing more traditional and more--

I may not remember because it's been a while. I've done so many of these projects. It wasn't just drawings. We had some video stuff and some other things. It was a very friendly atmosphere that was created. What I've experienced is a lot of people appreciate that someone will come to them and that there are these projects that they can take part in that are totally free for people, they can come.

A lot of people who worked on these projects, like I said, clients who have never made art before or made very little art before, had essentially very little access to culture. Very rarely had any of these people been in museums. Most of their culture came from what they saw on television or movies. That was a particular example where there was a very friendly--

Interviewer: In that situation especially, would they talk about the issue or was it just, they would come in and the focus would be on art? Was there any discussion of--?

Handwritten notes (right margin):

Context for collaboration
- Tension between immigrants and long standing English community
- Physical clashes

Everyone came together to create together - no animosity.

- Friendly atmosphere created
- Different media used.

People who worked on collaborative art
- People with little access to art culture
- Never made art before

[margin annotation: leave everything at the door]

Respondent: No, not so much. I don't remember. Maybe some people would make some comments, but mostly people just enjoyed the fact that they can do this activity and maybe not have to worry about these other issues for that brief little particular time.

[margin note: People enjoy creating together - Not have to worry about other issues for that time while creating]

Interviewer: For that moment. Even if it's just a moment for that particular period of time where they were all creating, would you say it was a case where the other stuff just didn't matter?

Respondent: Yes. I think so. It definitely felt that.

[margin note: Nothing else mattered.]

Interviewer: That's brilliant. I'm just going to ask you some more general questions about, yourself as an artist. How would you in your own words define art? What is art to you?

Respondent: You're asking the impossible question. The holy grail of questions.

Interviewer: I know. [laughs]

Respondent: I really don't know, to be honest. I think I'd be lying if I came out with an answer.

Interviewer: That's great.

[margin note: Description of art - too big to pinpoint]

Respondent: It's too big of a thing to try and pinpoint in a minute, so I'd rather not go there.

Interviewer: That's great. For yourself, when you're creating, whether in a group or on your own, do you have a process? Would you say you go through a particular process, or is it more fluid? How do you create?

Respondent: It's very fluid. I don't have

[margin note: process of creating - fluid]

a set process. I know that many artists do but for me, I like to go into everything totally fresh. A lot of times it's impulsive. Even this project, the drawing project, I remember the day when we started making these drawings and it was totally by accident. I had prepared some canvases because I was working on my own series of canvases, and I decided that I wanted to have some parts of these canvases be collaborative, but I had only wanted to do them with my housemate, Max at the time.

Her and I were going to do these black and white linear collaborative drawings on sections of these canvases. I prepared these canvases and I had primed them and they were drying in our house. Our house was pretty crazy. We were making art all over the house. There were these canvases there. Then I had gone out and I came back later that evening and there were like six or seven people just drawing with these colorful markers on these canvases.

I was like, "Guys, what are you doing? These are supposed to be just for me and Max, and they're supposed to be black and white." I was annoyed at first, but then I realized that there's something interesting happening, so I just went with it. Before I knew it, I was down there drawing too. That's when we discovered that form that was just very, very enjoyable and unpredictable, but it was totally by accident.

We'd already been getting to know our neighbors in the council estate. When we discovered this form, we were like, "Well, this is perfect. We should just invite more and more people and we should take the canvases into the community center on bingo nights and just have them out there

Handwritten margin notes:

Creating process
Fresh, impulsive

Collaborative creating
- Very enjoyable
- Unpredictable
- Accidental

File name: IL Interview.m4a

and people draw." That's how it started. It wasn't like I was like, "Right, I've got this idea for this great project, and this is how we're going to do." It organically happened.

I think, for me, that approach works way better. I find that I discover things that I would have never discovered if I had this very thought-out approach. I think the way that I work is I just like to open myself up to these opportunities. Then that still has a certain logic about it as well, because I realized at times that I am creating these, there is an approach to that because I'm opening myself up to allow these things to happen, if that makes sense?

Interviewer: Yes.

Respondent: A lot of artists will say, "Well, I embrace the accident or I allow myself--" Like Francis Bacon, if you know him, he's very famous for always saying, "Well, I employ the accident to my advantage." At the same time, I think he perfectly realizes that he sets himself up to create accidents just through the way that he's working, the chaos of his studio. He's setting himself up for that to happen.

It's both intentional and unintentional. That's why I can't really answer that question, what art is because it's this thing that works in this really mysterious way that's very hard to pinpoint. When you experience it, you know that you've experienced it. That's what I think great art is, you know it when you see it in a way.

Interviewer: There's something you said, you said you opened yourself up to whatever. In the experiences you're

Handwritten margin notes:
- Organic start → collab art project
- Open approach to art / Discovering new things
- Def. of art / Art as intentional and unintentional / You know 'great art' when you see it / Experience it.

talking of previously where you have two communities coming together, you talk about going into art sometimes intentionally and unintentionally. A part of the experience of these two groups in order for it to be successful, do you think there has to be some element of openness on both sides for a collaborative artwork to take place?

Respondent: For me, yes. I know artists that work in stricter ways with-- Not even necessarily stricter but maybe they'll employ game plan as a strategy. I'll send you-- One of artist I'm thinking of is Julia Vogl who makes what she calls social sculpture. The way that she goes about that if she goes to communities, she'll have a game plan. Oftentimes, there'll be an actual game that people will play or she does a lot of surveys where she has a questionnaire that she'll ask people.

Then based on that she creates these artworks, these sculptures most of the time based on the data that she collects and what people say. There's a structure to that. With what I'm doing, there's less of a structure. I guess the only structure is the thing that we're creating. Whether it's the drawings, videos, performances, the form, but then a lot of the time it becomes unclear even what we're creating. Sometimes while we're doing a drawing, we come up with a performance or vice versa. A lot of the time these things--

Interviewer: They just kind of become.

Respondent: Yes, they're kind of mixing with each other. My approach is open in that way. I often don't like to set parameters like that.

Interviewer: You mentioned before that

Less structural approach
Unclear what is being created
Things just mix together

she has some structure, but in terms of, the example you gave where you and your friend had this thing in black and white and you wanted it in black and white, and then it became something else. When you're working with groups who might have negative perceptions of each other, have you ever found that- I here an echo and I don't know what happened. I don't know if that was me.

Respondent: Sorry. I don't think it's for me because there's no sounds where I am, but I don't know.

Interviewer: Okay, that was probably me.

Respondent: Might be.

Interviewer: Yes. Do you find that they have any frustrations that might come out while creating?

Respondent: Yes.

Interviewer: Do you see that coming up? Can you talk a little bit about what that looks like?

Respondent: The most evident example was right at the start like 2010, early 2011, right before the London riots of 2011. We were working with a lot of kids who had come from really bad households, who were pretty lost. They were just looking for any opportunity to just cause chaos and cause trouble and steal, and basically do everything that they probably shouldn't be doing. They ended up stealing a lot of stuff from our house I remember, but at the same time, they had this-- I think they had this energy that I think they were able to translate into creative energy when they were around us.

[Handwritten margin note left:] wellbeing

[Handwritten margin notes right:]
People involved in creating
Lost children looking for an opportunity to cause trouble.

Able to translate energy into creative energy.

File name: IL Interview.m4a

I remember one of the guys who was my closest collaborator on this project, he's called Simon. Even when they started stealing stuff like-- They'd steal laptops from our house and all kinds of other things, bikes and stuff, kitchen stuff. All kinds of random things. Even when they started stealing, Simon was like, "Well, we're still going to have an open-door policy."

"Open door policy" even thoug things were being stolen to foster expression through art"

He was just that kind of a person that saw the bigger picture and it wasn't like he was trying-- We had this other flatmate, he was a musician. He's actually a very successful musician now, but he was very more private. He still worked with us but he was very protective. He ended up putting a big lock on his door to his room.

"locked door" diff. approach
— still engaged in creating

Simon was-- When I agreed with him in the end, we just started trying to hide our valuable things, but we still kept the door open. A lot of these kids would come in and they did a lot of work on some of their earliest drawings, and they're angry. They'd come in and write swear words, but then we tell them, "All right, if you're going to write swear words, we want you to make them look really, really good. Use all kinds of colors and do all kinds of designs in your letters and think about graffiti."

Expression of anger artistically

We'd show them some videos of graffiti artists. They got really excited about that. At the same time, they take paint and start throwing it around the house. Then we would tell them about, "Well, this is great. You've made this big blob on the canvas. Let's let that dry overnight, come back tomorrow, and you can do some drawing on top of that." We were always trying to get them to see how they can take that energy that they had and create

Transfuse energy to creating art

File name: IL Interview.m4a

something positive out of it. I remember we started passing out smaller canvases to a bunch of these group of kids.

A lot of them would come back a few days later with their own drawings that they'd done. I remember these three-year-old girls coming in one day, and they brought us these two canvases that they had made. We ended up showing these at exhibitions that we were doing. It was like that, but at the same time you're doing that, but you recognize how desperate a lot of these people are. Which is only getting worse I think on both sides of the pond. It's not very often that I think there is art. That's why I think collaborative and social practice is so important.

I think, unfortunately, the really, really good social practice is not very well supported by public funding anymore. It's certainly not supported in the US. I think Canada is better from what I hear. The UK is getting worse. The only countries I think that are really supporting, and it's because they have a lot of money, is the Scandinavian countries. Those are the countries that I'm actually working with at the moment. I'm working at a project the Norwegian Arts Council.

Interviewer: With the same collaborative arts and communities?

Respondent: Yes, it's kind of what the drawing project is going to become. It's like an expanded version. That project is going to evolve into other, basically, art that has a lot of other missions. It's going to touch on ecological themes and more varied forms of art-making, basically. That's a whole another conversation. I forgot, I went on a tangent again. What

Handwritten margin notes:
- Make something positive from angry energy
- Little girls with canvases
- ? Importance of collaborative and social practice
- — Desperation
- Not supported by public funding
- Missions of art

was I talking about?

Interviewer: [laughs] I don't even know. I think you were just telling me about just letting out the frustrations.

Respondent: Basically, people need that all over the world. There's a lot of both government and non-government programs that are trying to tackle that, but I'm afraid that a lot of them are just unsuccessful because either they provide, if it's an art program-- There's a lot of NGOs that are working with refugees now, but a lot of what they offer is so defined. It's often very patronizing to people. They're often really dumbed-down version of what these people are capable of. A lot of the time, it's very, very simple little art projects that don't really allow.

Interviewer: Challenge.

Respondent: Don't challenge or don't allow people to be who they need to be. Unfortunately, that's the project that are getting the funding because they're safe. Unless funding bodies are willing to take chances to support art that has real potential to create change-- I don't know if you've heard of the artist Tim Rollins.

Interviewer: I haven't, no.

Respondent: You haven't?

Interviewer: No.

Respondent: You should definitely look him up. I'd tell you to interview him, but unfortunately, he passed away a couple of years ago. I got to know him towards the end of his life, and he is a very successful artist. He formed this group called Tim Rollins and K.O.S which stands for the Kids of Survival. He

File name: IL Interview.m4a

[Handwritten margin notes:]
Need for collaborative art programs worldwide

Unsuccessful programs
- Defined, patronizing
- Dumbed down, simple
- Don't allow

started working in the Bronx in the late '70s, early '80s. He was an art teacher, and he was working on a very run-down part of the Bronx with a lot of very poor kids who no one ever gave a chance to.

They formed this after school art club, and they started making art together, and because of the big boom in the art market in Manhattan around the early '80s, they became very successful with this work. They were showing and selling in a lot of big galleries. They became very, very successful, and they kept working up until a few years ago when he passed away. I think some of the kids that he was working with, who are now in their 40s, they're still making work together even after he passed on. They were working together and inviting new members ever since the early '80s, and doing workshops all over the world.

When I got to know Tim a few years before he passed, he was saying they're barely surviving, living paycheck to paycheck even though they'd created this incredible-- He was one of the first incredible true social artists. Even though they'd kind of created this revolution where they have this very powerful statement, that art can come out of anyone and at any place. Which is what I strive to work towards.

[handwritten note:] art can come of of anyone at any place

Interviewer: Strive towards. In that situation, what do you think the artwork did for those kids? For those who were in the-

Respondent: It changed their lives completely. In the case of-

Interviewer: How?

Respondent: How?

File name: IL Interview.m4a

Interviewer: Yes.

Respondent: For starters, those particular kids had jobs from the time they were in their teenagers. They would come into work, and they'd get paid because their art was selling on the high art market. That's this beautiful form of subverting the art market. Which is very, very tightly controlled by the one person. It's this way of saying, "Well, not only the 1% can make art and sell art, everyone else can as well." It's like, "How do you disrupt that unfortunate system that we've created?"

Interviewer: That's out there. Do you think there were any personal or emotional benefits to those who are involved as well? Apart from them being able to go and have that purpose and have a job, do you think there was any emotional maybe even therapeutic-? [crosstalk]

Respondent: Absolutely. Are you talking about in the case of Tim Rollins specifically?

Interviewer: Just in general.

Respondent: General?

Interviewer: Yes.

Respondent: Yes, absolutely. Anytime I think when you go to someone who very few people give opportunities to. Whether it's because of some sort of profiling, whether it's social profiling, racial profiling, whatever. Someone goes up to that person and says, "You can do this thing, and here's how you can do it." A, they're going to gain in confidence and they're going to believe that they can contribute to society in the way that a large part of society tries to tell them that

File name: IL Interview.m4a

Social action within art
Subversion of a controlled market.

Emotional & personal benefits to collaborative creating.
- Confidence.
- Belief that they can contribute to society.

they can't.

It's a very very clear problem that I think everyone sees but I think because of bureaucracy and because of long-standing social systems and social orders, it's so hard to break through. And a lot of artists are fighting to do something about it but it's so hard. That's why even someone like Tim Rollins, makes such a contribution for the sake of his life he's just having a really hard time to continue.

Interviewer: To continue that.

Respondent: Yes, to continue that way of working.

Interviewer: One of the things that's interesting-- What I particularly I'm looking at is basically collaborative creating, what comes out of collaborative creating and how that can be placed into conflict situations, and particularly intergroup. What I find very interesting in what you said is you have experiences where art has been placed in situations with conflicting groups and you have situations where art has been placed in situations where there are those who feel like they haven't been heard or feel like marginalized.

From your experience and from what you've seen. At this point, can you confidently say that creating together collaborative art is something that has a positive effect in these situations?

Respondent: I think absolutely, if it's done for the right reasons and if it's done in a way that is really in the interests of the people that it tries to involve. Like I mentioned, I think there's very, very few artists and projects that are working in this way. There's a lot that are pretending

File name: IL Interview.m4a

Handwritten margin notes:

Context for collab. creating
- Clear problems of marginalization
- Hard to break through

Context for collab creating
- Done in the interests of people involved.

Transcript

to be working this way, but unfortunately a lot of times it's for PR purposes. It's for institutions to advertise what they're doing as charity work a lot of the time, and they employ really safe, kind of cheap, very unchallenging projects. I think that the true practitioners that are really out there, unselfishly trying to make a difference are very few and far between.

Interviewer: The goal really needs to be for the benefit of those involved for there to be need for it to make a difference? There has to be that intention, I think.

Respondent: Yes, there has to be that intention and also the approach has to be an original and challenging approach, and not relying on more standard approaches. You probably know more about this. I know that there must be all kinds of studies that are being done, such as yours probably, on what is the best approach to tackle these conflicts, if you like. From my experience, you have to work in a way that really connects to people and really tries to understand what they need. Rather than, again, kind of asserting your own parameters on that community.

Interviewer: From your experience, as you said before, a lot of these projects that you've done have been quite less structured, quite laid back. People are kind of free to work as they please.

Respondent: I think that's very important because then people are more willing to, not only tell you, but to show you what they're interested in and what they can contribute. As soon as you allow that openness, people feel more free, I think.

Interviewer: I'm going to ask you a

Handwritten notes (right margin):

unsuccessful/fake out projects
- PR purposes
- safe/unchallenging projects
 Successful
 Unselfishly making a difference.

Successful content for collab art
< Original
- Challenging
 Non-standard

- Connect to people
 Understand their needs.
- Not asserting parameters.

- people free to work as they please

- Openess causes people to feel more free.

Transcript

question about having to do with immersion and focus when creating. In that kind of setting, do you find that people are concentrated on their artwork or focused on their artwork? The talking and the conversing and getting a cup of tea and all these things, would you consider all of that a part of the art as well?

Respondent: Yes, absolutely. Again, some of the earliest projects that we did, which in many ways, I think they are some of the more successful ones because the environment was really organic, I lived in that community for almost two years, so I really got to know the people that I was working with very well. A lot of the time someone would be like taking photographs, while people are drawing. Other people would be chatting.

Someone might even grab a video camera and start making a movie, it was that organic. Then sometimes I remember this lady, she was a chain smoker and someone took a picture of her smoking and that became a-- We decided this screen print, that make it really big on this big canvas of this image of her smoking. Then we drew all around her. You can see that on canvas on my website.

It became this real strange but powerful to me, social statement of-- That just brings us a lot of questions and it all came just from a random photograph that we didn't know that we were going to use for this particular purpose. I don't even know who took that photograph. You can see the canvas, it's quite controversial and very few places are willing to exhibit that particular canvas. Many, because either swear words will be there, some sexual imagery, some other images that

[handwritten annotations in right column:]
Organic environment are part of the artwork

Different media in collaboration drawing, photographs

Organic creation of art

Example of the organic nature of collaborative art

File name: IL Interview.m4a

might be offensive to some people.

At the same time, it's not like the history of art hasn't tackled these kinds of images. Again, that brings up another question of, what is appropriate where? There's this big division between community art and the higher art world. It's almost like this kind of art is okay in the high art world, but because it's a community created canvas, it's almost like a higher art world, I think oftentimes.

This is I think the problem that Tim Rollins had ultimately, was that there's just this big wall between community art and higher art. The two sides don't really know what to do with one another. Community art a lot of the time separates itself from the higher art world and the higher art world looks down upon community art, and says, "Well, that's not real art." You know, "Those aren't real artists."

Then community art tries to shy away from that because they're either offended by that approach or they're totally unaware of the fact that high art exists. Of course, the reality is that all the money is stuck in high art and community artworks oftentimes on shoestring budgets or no budgets. In some ways, I think the only true artists working in social art are the artists that are trying to break down the barrier between community art, and high art or collaborative art and high art. There's a lot of collaborative art that exists within the bubble of high art that isn't really socially driven.

You can look at a lot of artists who have worked collaboratively. I think it's important to make that distinction, that

Handwritten margin notes:
Division between "higher" art and community art

high art vs. community art

"

11

collaboration is not always socially-

Interviewer: Driven.

Respondent: -driven. It can be a very powerful tool in social work.

Interviewer: Wow, that's great.

Respondent: Again, I'm not sure what the other question was.

Interviewer: Doesn't matter. [laughs] I'm really fascinated, I think right now, by how you describe these events. How you describe the coming together. You say, it's not really structured but the entire process, most of it contributes to the art. Whether it's the talking or someone deciding, "I'm going to take a picture." Someone deciding, "I'm going to take a video", or someone just chatting or drawing while you're drinking a cup of tea. Even though it's not this immersed or a focused experience, would you say that it still all contributes to this work of art?

Respondent: Absolutely. This kind of environment and atmosphere that I'm describing, it doesn't always happen. It's not like every project that I've ever done is that open and people feel that free to work with one another. A lot of times it is just people sitting at a table and doodling on their own and no one's really talking to one another or very little. It depends on the environment. Obviously, I'm always trying to make it as open and social, an atmosphere as possible.

Sometimes a lot of people feel intimidated because a lot of projects that we've done have been commissioned by an art institution or a community organization or what have you. I've gone in or I've gone on with other artists or

File name: IL Interview.m4a

Not always an open, free environment.

Sometimes there is little communication

Environment differs

some of my assistants have gone in to run workshops. It ends up being quite a boring workshop because people that go to this community center or a part of the organization are invited to take part in this workshop, but they don't really know what they're there to do.

"Boring" when people don't know what to do"

It's like someone shows up with a canvas and hands them some marker pens and tells them they can draw whatever they want. Sometimes people feel very confused. It really varies. I would say the success rate is probably right around 50% or a little lower even.

"Sometimes confused.

Interviewer: If you could just maybe list a couple of things, what do you think the success of that depends on from your experience?

Respondent: I think it largely depends on the people involved. I think people have to be open and they have to have an appetite for new things. Even if they feel like they're not good at art or they've never made art before, whatever, if there's that openness, then you're more likely to have a successful project. There's been instances where we've gone into retirement homes and we've had successful instances and not so successful instances.

Success of collaborative art depends on people involved.

- Openess
- Appetite for new things

Times that have been successful is when people are open and when they're just willing to let go of these preconceptions that they might have and just try to have fun. A lot of time it just comes down to people's personality. I remember this one specific time when this lady was in a retirement home and, this lady was like-- She didn't want to participate, seemingly at first. She was just walking around this big table we had our canvas laid out on, and she wasn't really a huge-- Kind of

- Open
- Willing to let go of preconceptions
- Try to have fun

File name: IL Interview.m4a

wandering off by herself.

Then at the very end, we were literally packing up. She came and picked up, she asked me, "Can I have a red marker pen, please?" I was like, "Okay, here's a red marker pen." She took it and she drew this tiny little heart under-- Someone had drawn a tree with some grass around the base of the tree. She drew this tiny little heart at the base of the tree and she said, "That heart is from my husband who passed away last year."

just that was such a powerful statement, even though it took her like a second to draw a heart. I think it was clear that she had been walking around and maybe thinking about this the whole time. That contribution had a real powerful meaning to her. You could tell that she was really engrossed in this whole experience. You could tell by the way she spoke that it meant a lot to her, even though she didn't really draw that much.

Again, it's that openness, it's that willing to open yourself up and to be like, "Well, here are these crazy artists who are coming in with this oversized canvas asking us to do these drawings. Why is that for us and how can that help us?" It's you're either going to have this standoff-ish attitude or you're going to say, "Wow, what is this?" Maybe I can find a way to contribute and maybe I can find a way to grow through this experience. It's a bit like that-

Interviewer: That's amazing.

Respondent: -I think.

Interviewer: Her process wasn't the same as everyone else's, yet she still had that space to contribute her way.

File name: IL Interview.m4a

Handwritten margin notes:

- Different personalities and processes example ✓

Engrossed in the whole experience (flows). (Even though her process looked different to others.

- Openess

That's amazing. [laughs]

Respondent: A lot of the times, again, you don't really see these things coming and you don't really know when you're going to get a successful project. That particular canvas was a very successful canvas and her little heart is still there.

Interviewer: Wow.

Respondent: I've been trying to find a home for some of these big canvases for a long time, but that's a whole other project.

Interviewer: I do want to ask you, what makes a project successful for you? At the end of it, what makes you say, "Okay, good, this one was a success"?

Respondent: Probably if there was some positive outcome both for the people involved and for a larger cause that might be putting on an important exhibition where more people are able to see the artwork that we've created, so it can kind of spread a positive message. That's quite difficult to do in many ways. This project so far has been-- Again I'm not even sure I can say it's been that successful because we've had a lot of things not go so well.

Then with the decline in public funding in England, I was very disappointed that I wasn't able to continue working there. I wasn't able to sustain the project. I wasn't able because of this problem, I've tried as much as I can to market the artwork that we-

Interviewer: that you create.

Respondent: -create, but because there's such a big wall between community art and the art market, it's

Handwritten margin notes:

Collab creating elements — element of surprise

Success of artwork dependent on — positive outcome for artists and people able to see/experience art.

File name: IL Interview.m4a

been very difficult. Very few commercial galleries have been willing to show these works and recreate.

Interviewer: In terms of being able to showcase the art, you feel like there is room for more success but, in terms of the impact for those involved, would you say that you've seen success in that area?

Respondent: Yes, with some of the examples that I described I think definitely it's had an impact on the participants to varying degrees. I think you asked me what I thought that depended on, and I'm not sure that there is for me, a clear answer or a clear reason for that. I really don't know, I don't know what that depends on. I'm quite self-critical and I always think "Well, could I have done something better? Could I have said something-?" [crosstalk]

Ambiguity on what makes a successful work of art.

Interviewer: [laughs]

Respondent: When something doesn't go so well, "Could I have done something more?" I don't know. I think one of the big failures that I had was when I worked with Native Americans in Arizona and New Mexico, and that was probably the biggest culture clash that I experienced. Even though I am quite knowledgeable of native culture and I have a lot native friends. I set up a project to go work with the Hopi and the Acoma Native communities in Arizona and New Mexico, and we made a lot of drawings together. Especially with the Hopi-- I don't know if you know about these Native communities there.

Example of a "failed" collaborative work effort

Interviewer: To an extent, I'm not very knowledgeable, but yes.

File name: IL Interview.m4a

Respondent: The Hopi especially, are very private. It's like a lot of people have been surprised that I as a white man can go and have been accepted to go in there and run a project with them. They've been very, very surprised. I've got to know a few Hopi artists, and we set up this project for part of their community to contribute to these large canvasses, and they made three incredible canvasses. They're incredible, and I think you can see all of them on the-

Interviewer: On your website.

Respondent: -website. What happened was, they gave me one. The first one that they made, they gave me. This project was funded by Arts Council England, and I thought we had an understanding that we're making this work for a project that was going to be exhibited. I had the American Museum in Bath interested in showing these works in Bath, which I thought was great because, especially in the UK and all over Europe for instance, Native American art is pretty much not represented at all.

Of course, one of the big problems that the Western world has is that native culture is completely misunderstood. The point of the project in many ways, was to get native people to tell their stories in their own way, in their own style and then this gets shown in a country that knows nothing about this culture. That was the idea, and I thought that idea was pretty clear, and I thought that the community understood that and was willing to work towards that.

Though, what happened was, they gave me the first canvas and then I had to go back to England, and communication

Example continued.

Context for collaborative art:
- Sharing stories through art.

File name: IL Interview.m4a

was very hard because none of the artists that I was working with and none of the people in that community-- Very few of them used, even telephones.

Interviewer: [laughs]

Respondent: Certainly no e-mail. I ended up writing some letters, handwritten letters to some of them, asking what was going on and I couldn't really get in touch with anyone. Then one day, I saw these works online just randomly when I was researching something else. What the Hopi community had done is, they had set up their own art gallery which didn't exist before, and these two canvasses were the two showcase works on this gallery website.

Then I got in touch with that gallery, and I tried to explain to them that these works were funded by Arts Council England. It was a project that was-- They weren't works that were meant to be sold so quickly, they were a part of this project. They didn't seem to understand that. The people that ran this gallery, I don't think they had a clue what I was talking about. What happened was, they ended up selling them, like a month later, to Norwegian collectors, of all people. I tried to ask them to put me in touch with these collectors and they claimed that they didn't know who they were-

Interviewer: [laughs]

Respondent: -and didn't have their contact information, which might have been true. Anyway, those works have been kind of lost and they're probably in some rich people's house.

Interviewer: They didn't fulfill, really, the

Example of "failed" art – miscommunication – unintended audience

File name: IL Interview.m4a

purpose of that exposure-

Respondent: No.

Interviewer: -that you wanted?

Respondent: No, I don't really fault them because it was a cultural problem. I think they just didn't understand the point of the project and they were just after some quick money. They set up this gallery, I think, in many ways, just to show these two artworks. There were some other artworks that were displayed on their website, but after they sold these two canvasses, that gallery kind of-

Interviewer: Disappeared.

Respondent: I don't think it exists anymore. That was, in a way, an interesting experience.

Interviewer: Definitely.

Respondent: I've certainly learned a lesson. I couldn't really get through to this community to trust, to see eye-to-eye about what we were doing. Clearly, we had different agendas

Interviewer: Yes, intention.

Respondent: I even tried to speak to them about value, and about what value was and how value is created, because I think there was a little bit of conversation. Some people would ask me "Well, where are these going to go? What are we going to do with these drawings?" I was like, "Well it's part of--" I tried to explain to them this very thing. "Part of this project that's going to be-- Most likely they're going to be shown at the American Museum in Bath." I tried to explain to them what that museum was and what it showed. That they were

Handwritten margin notes:

Miscommunication of purpose

Importance of intention
- After some quick money

File name: IL Interview.m4a

Transcript

hopefully going to go on to other exhibitions and that people would hopefully write about them, and they would become-

Interviewer: More aware.

Respondent: Yes, promote awareness, and a way for people to study their incredible culture, and so on and so forth. I would try to tell them, "That's how value is created, so you can go and sell--" I tried to tell them how they are being exploited by the Western art market. Especially if you've been to Santa Fe, what happens is gallerists would go to Pueblos, and they'll buy a bunch of their carvings for like $20, and then sell them for like $200 in the galleries.

I tried to tell them "Well, if you quickly sell your work like that, you're being exploited, but if you are able to somehow--" It's really difficult for them because a lot of them are living in poverty, so they don't really have any opportunities.

Interviewer: That's right.

Respondent: I would try to, basically, tell them "Look, I'm giving you an opportunity to be part of something that isn't just, selling your stuff like that for $20.

Interviewer: Yes, definitely.

Respondent: You can-

Interviewer: You can do something bigger.

Respondent: -take part of something that's more valuable.

Interviewer: With it, absolutely.

Example of

File name: IL Interview.m4a

Respondent: Unfortunately, I've been unsuccessful-

Interviewer: In that case.

Respondent: -with this, so far. I don't know if I have the energy to try it again.

Interviewer: You never know. [laughs]

Respondent: Maybe.

Interviewer: That's great. I think this was a very successful interview, I'm very fascinated.

Respondent: Yes, I hope I've given you some things to think about.

Interviewer: Thank you so much for even agreeing to do this. This-

Respondent: Yes, thank you for getting in touch with me.

Appendix AF: Reflections for Qualitative Studies

Facilitating these studies was a very intriguing and eye-opening experience for me. As an artist, I personally had never been in a situation where I create in a group of people with whom I knew had opposing views as I did. I did however, enter this study with a strong belief in the power of arts and it's ability to bring people together. Even though this was my belief, I was still very curious to see how participants would relate to each other in this context. I remained aware of my own expectations, and took extra care to ensure that the voices of the participants were heard through my interpretation of the transcripts.

In spite of my own resolve to remain neutral, there were several very intriguing moments during this study. One example being in the non-perspective giving and taking condition. The second image displayed was such a mirroring of the process of creating of the participants themselves. The atmosphere in the beginning of the creating exercise started off as quite a chaotic one, with each participant trying to get their point across to each other. Participants expressed this frustration in their artwork, and the struggle to come to reconciliation can be seen in their artwork. Discussing this with participants turned out to be even more intriguing as is evident in the thematic analysis, as they were able to articulate the change in the atmosphere that the creating together facilitated.

Upon reflection, there would also be value added to a study such as this to have an observational aspect. Watching the study unfold and experiencing the changes in the atmosphere as participants created together was a very rewarding and intriguing experience. For the purpose of this study, the thematic analysis provides a very insightful description of the participants experiences and the semiotic analyses shows the process of creating of participants in a way that I had not anticipated. During the interviews, it was also a wonderful experience to hear participants describing their feelings post creating and describing feelings of unity and togetherness, and attributing that to the creating exercise.

The semiotic analysis also provided some unexpected data, within which I was able to discover potential evidence of flow. I had no expectations from the semiotic analysis and approached this study as well with sheer curiosity. With regard to analysis, I gave the participants the opportunity to describe their works of art and what it meant to them, and factored this into the overall analysis. Though again, interpretation of artwork is subjective, the testimony from the participants and the guidance of the research question helped to ensure that the analysis best represented the participants and shed some light on the research.

The IPA research study was one that I was extremely excited to divulge in, because as an artist myself, I have always thought art to be such a personal experience, such a personal expression that can often only be described by brush strokes or by the highs and lows of a musical piece. As an artist, my tools of expression are writing and singing. I had never written a collaborative piece before; all my written work had been personal. I had sung in groups before but never really took the time to make note of the experience and what it involved. I came into this study with pure curiosity, intrigued to gain an understanding of other artists experiences collaborating.

I had to remain aware throughout analysis of this study, of my own convictions about the power of art and how in my own personal experiences, art has helped me to heal from difficult moments in life and how I myself am evidence of art playing a vital role in my own personal wellbeing. With this in mind is was also a very moving experience, to hear other artists giving similar testimonies of their own experiences with the arts and the personal effects it has had on them.

My experiences interviewing these artists was quite thrilling. I had no expectations of what I would hear, but I was hoping to hear success stories of art creating peace and bringing people together. Isaac's interview in particular intrigues me, as he mentioned opposing groups creating together, but continuing to dislike each other. In the best possible world the

participants would leave loving each other and becoming fast friends but what was particularly intriguing, which I had not necessarily anticipated, was the implication that creating together could perhaps allow for that calm and peace during the creating process, and may not always translate outside of that moment. It was interesting however, to hear

collaborative arts being described as almost a room that one enters to fulfil a goal, and during the fulfilment of that goal, nothing else matters.

I enjoyed thoroughly listening to the experiences of participants. Though I had my thoughts about the arts, the very subjective nature of arts allowed me to be completely open to possibilities I may not have considered being expressed by participants. I was able in this case to take myself and my experiences out of the equation, and as IPA requires, allow the experiences of the participants to shine. Of course, interpretation is also quite subjective and can vary based on intent. Thus, I wrote my discussion section separate from the results to ensure that my analysis was very clearly written with the intent of understanding the participants experiences in the contexts that are being researched in this study.