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Moral behaviour and the formation of social identity in minimal virtual environment

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Abstract

Social media has become a popular medium for social interaction. Behavior on these mediums has gained researchers attention due to their unorthodox, immoral forms of behavior. By providing a primitive virtual environment whereby participants can create their own meaning and constructs to a game, it can provide insight into the reasons for their emerging behaviors.

The minimal group studies provide a platform whereby participants can engage in a virtual world, and through which contrast their own meaning to a simplistic game. Through their attached meaning, they express a formation of identity, and an emergence of new forms of behaviors. Although such emerging behavior is displayed in other contexts such as crowds, recent theories have developed extending to specifically virtually interaction. The SIDE model argues that anonymity enhances social identity and identity performance in interaction, inducing anti-normative behaviors to emerge. This study aims to examine the participant's constructs of the minimal game and through which determining if their emerging behaviour is due to a loss of identity or an evolving social identity as the SIDE model indicates.

This study uses a qualitative, social constructionist design as it will enable the analysis of the social construction of the participants interaction in the game and allow for the understandings and insights of how they develop meaningful experiences. Although useful, this method is limited as it can only draw emphasis on the participants construction, and their expression of what occurred in the game.

The results indicate that the participants constructed the game by attaching meaning to their surround environment. They linked the context of the game to politics, money and social dynamic. Further the results indicate that within the individual condition they constructed that their behaviour was dependant on the context, and therefore justified. In the group context, there was a greater inclination to perception that all behaviour should benefit the group. This however, was contested by groups members stating that behaviour was circumstantial driven, and there were situations in which behaviour toward the group should not be expected.

Ultimately, both aspects of the SIDE model, cognitive and strategic, were evident in the data. The anonymity of virtual worlds evoked the individuals into a greater emergence of social

identity leading a new forms of behaviour as well as provides protection from judgement allowing for strategic behaviour is emerge.

Key words:

Minimal Group; Deindividuation, SIDE model; Virtual Interaction Application (VIAPPL), Moral behaviour

Declaration

I, Simone Taylor, declare that

- (i) the research reported in this thesis, except where otherwise indicated, is my original work;
- (ii) this thesis has not been submitted for any degree or examination at any other university;
- (iii) this thesis does not contain other persons' data, pictures, graphs or other information, unless specifically acknowledged as being sourced from other persons; and
- (iv) this thesis does not contain other persons' writing, unless specifically acknowledged as being sourced from other researchers. Where other written sources have been quoted, then:
 - a) their words have been re-written, but the general information attributed to them has been referenced;
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Kevin Durrheim

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Chapter 1: Introduction

The emergence of new and increasingly accessible media platforms in recent years has encouraged social networking as a popular way of interacting. Whether it is by email, cell phone or computer programs, interaction has shifted from face to face to virtual (Biocca & Harms, 2002). Computer-mediated interaction has, as a result, become a focus of interest for social psychological research. Computer-mediated interaction environments range in multiple forms of virtual world mediums including online blogs, chat rooms, social media sites and online gaming. In the United States alone, 68% of the population is involved in online gaming (Barnett & Coulson, 2010).

This form of interaction limits embodiment element of interaction (faces and voices); but rather is often representation of the self through media configurations, such as computer graphics and avatars. Evans (2012) argues that although immediate embodiment is not present, a psychological state exists nonetheless. This state is facilitated by the continuous stream of stimuli and experiences transmitted by the computer which captivate the attention of the user, thus immersing their mind (Evans, 2012). The question then arises as to whether or not this different form of interaction will convey similar social meanings, constructs and social norms as that of real world interactions (Biocca & Harms, 2002).

There has been increasing interest in psychological research around understanding the types of behaviours that emerge from social interactions in the virtual environments created by new media technologies (Biocca, Harms, & Burgoon, 2003; Mennecke, Triplett, Hassall, & Heer, 2011). Observation of behaviour in these environments has noted aggressive, uninhibited behaviour, often demonstrated by an activity known as 'flaming' (Joinson, 2001). Flaming, according to Bubaš (2001), relates to verbal expressions of aggression and is used for insulting another via a computer medium in the form of hostile comments, name calling or cursing.

This form of behaviour is often socially constructed as immoral, as it is anti normative to the expected social behaviour. Moral and immoral behaviour therefore is not defined in terms of a particular action, but rather within the socially construction norm and expectation. This is particularly common in discussion forums on computer mediums. The absence of social presence, it is argued, provides people with the freedom to behave more aggressively towards

one another with no influence of moral responsibility thus influencing the social expectations and normative behaviours. (Bubaš, 2001).

This behaviour observed in virtual environments has stimulated research into the reasons behind these behaviours (Biocca & Harms, 2002). Differing theories such as Deindividuation theory and the SIDE model offer constricting explanations for the behaviour. The Deindividuation theory argues that like in a crowd, people in a virtual reality lose their indemnity and their behaviour becomes anti-normative and uninhibited. The SIDE model however, argues that the virtual world entities the categorization effect of groups leading to a formation of a stronger social identity, through which more prominent behaviour is observed.

Both these theories investigate how individuals generate and construct systems of meaning, which influence their behaviour. These systems help us to understand the motives for behaviour and the diverse experiences within the different systems (Raskin, 2002). It is, then, not the external, observable behaviour that is of interest but rather the constructed meaning that is attached to the behaviour.

This research project, therefore, will use constructionist lens to determine what meanings are created from people's interactions within a minimalist virtual environment in order to provide predictions and insight into behaviour experienced during interactions within virtual reality.

Chapter 2: Literature review

According to Postmes and Spears (2013), there is a perceived notion that internet interaction results in individuals being less influenced by societal norms as well as less inclined towards moral reasonability as it lacks the extent of connectivity of face to face interaction. Moreover, online behaviour is described as being aggressive and uninhibited. The following theories provide insight into these expectations of behaviour within virtual worlds and discuss the meaning and motives behind such behaviour.

1. Deindividuation theory:

Deindividuation theory attempts to explain crowd behaviour. When people are in a crowd, they receive anonymity. Reicher, Spears, & Postmes (1995), explain that according to this theory, the indistinguishable attribute of anonymity is what entices loss of individuality and thereby individual reasonability that controls behaviour. Mann, Newton, & Innes (1982) support this argument noting that anonymity causes the individual to reduce their self-awareness and, as a result, lose their identity. The loss of identity has two consequences; the first is that crowd members are unable to make conscious discriminations. Immersion in a group minimises self-observation, resulting in less self-monitoring behaviour. Secondly, the consciousness of the individual is replaced with a collective consciousness, optimising the influence of suggestion (Reicher et al., 1995).

These consequences allow for the emergence exaggerated reactive behaviours, such as aggression and violence, which would have previously been regulated by out-group judgements upon the individual (Mann, et al., 1982). For example, an individual, in their fury, is unlikely to throw a glass bottle at a building since this is against social norms and they fear the regulation of such behaviour by peer judgement. However, when placed in an angry crowd the same individual is freed from peer judgement by the anonymity provided by the crowd, with responsibility shifting from the individual to the group (Reicher et al., 1995). The anonymity of the crowd diffuses responsibility from the individual as the anonymity provides a reduction from out-group social accountability (Mann, et al., 1982). This allows for uninhibited, aggressive behaviour. It should be noted that this behaviour may be either positive or negative: it depends on the construct within the group and the collective suggestion of behaviour from the crowd (Reicher et al., 1995).

A virtual environment provides similar anonymity to that of a crowd, suggesting that Deindividuation theory will also come into play in the expression of behaviour within this environment. The argued loss of individuality, self-evaluation and moral rationality offers an explanation as to why a computer medium evokes uninhibited and immoral behaviours (Postmes & Spears, 2013).

2. The embodied social presence theory:

Mennecke, Triplet, Hassall, Conde and Heer (2011) argue against the above statement, indicating that individuals are socially engaged beings in virtual worlds thus dismissing the reduced self-awareness of Deindividuation theory. The embodied social presence theory (ESP), according to Mennecke et al., (2011), argues that virtual reality provides a context of collaboration in which social agents engage in goal orientated activities. These activities elevate the level of engagement as the social actors become more embodied in the environment.

To explain this more fully, Biocca, Harms and Burgoon (2003) define 'social presence' as "the sense of 'being together with another' including primitive responses to social cues, simulations of other minds..." (p.9). They indicate that the social presence within a virtual reality is perceived to be less engaged due to the lack of face to face interaction. Despite not being psychically present, however, the social presence theory indicates that social presence is not dependent upon this but on three key attributes: involvement, immediacy and intimacy. These three features outline the maintenance of interpersonal relationships and the extent to which individuals feel connected or socially present to one another.

According to this theory, then, it is evident that virtual reality elevates social presence as it enables two of these attributes (involvement and immediacy). Virtual reality creates a sense of mutual awareness as the individuals engaged in the environment are immediately accessible and available to one another (Biocca et al., 2003). Moreover, virtual reality extends the potential of behavioural activities thus intensifying the involvement attribute of social presence. Immediate involvement, therefore, allows people within a virtual reality environment to feel socially engaged and embodied in their environment, despite the lack of face to face interaction (Mennecke et al., 2011). Although this theory provides a sound argument for an engaged social presence within virtual reality, thus arguing against

deindividuation, it does not address nor provide an explanation for the immoral behaviour within virtual reality.

3. Social identity model of Deindividuation effects theory (SIDE):

Unlike Deindividuation theory, the SIDE model indicates that virtual interaction is not self-reduced nor uninhibited, but rather a socially influenced interaction of social engagement (Spears, Postmes, Lea, & Wolbert, 2002). The authors argue from a social identity theory (SIT) viewpoint whereby the immoral behaviours of individuals are attributed to a shift in identity from an individual to group.

Social identity theory:

This theory is explained as a “group membership and intergroup relations based on self-categorisation, social comparison and the construction of a shared self-definition in terms of in-group defining properties” (Hogg & Vaughan, 2006, p. 401.) Moreover, it is a theory used to explain intergroup relations of self-categorisation, social influence and group behaviour. Social categorisation is people’s way of ordering their social environments by forming meaning groups (Ellmers, 1993). Social identity theory illustrates that the categorisation of people into groups can accentuate a shift from personal identity to social identity.

The categorisation, whether of significant or trivial criteria, results in the self no longer viewing themselves as an individual but as a group member (Hénaff, Michinov, Bohec, & Delaval, 2015). Through categorisation, the perceptions of the in-groups similarities are accentuated whilst the out-group similarities are diminished whilst their differences are accentuated. The self then cognitively shifts from *I* to *we* and is viewed in terms of the group.

A redefinition of the self occurs where the characteristics, norms and preferences of the group become that of the individuals (Haslam, Reicher & Platow, 2013). The individual integrates the characteristics of the group into their own individual identity (Tajfel & Turner, as cited in Sachdev & Bourhis, 1984). It does not reduce behaviour to individual characteristics and motivations but it indicates that individualistic characteristics are social structures that are altered and influenced through the identity of others.

Likewise, self-perception is no longer independent but linked to the perception of worth of the group. The self-esteem of a group member is linked to maintaining a positive social

identity, Turner, Brown, & Tajfel, (1979). The group interest, then, is viewed as personal interest thereby alluding to the in-group members' motivation of favouring the in-group in order to further establish their positive identity thus strengthening personal self-esteem. This is accomplished through the creation of favourable comparisons between the members of the in-group and distinctions from the out-group (Tajfel, 1982).

Tajfel (1982) further outlines that when a group is amongst another group, the intergroup comparison between the groups will lead to greater in-group favouritism and will result in some of the group characteristics becoming salient. This salience exaggerates behaviours as group members' act in accordance with their group identity. Individuals will be categorised in multiple groups indicating that different social identities may be salient at different times (Reicher et al., 1995). Intergroup competition, therefore, increases the salience of social identification and the behaviour of the individuals towards the social norms of the group (Cikara, Botvinick, & Fiske, 2011). The group, then, does not merely conform to the norms of group behaviour, but actions and motives become polarised indicating that people in groups are more exaggerated in their reactions than individuals.

Cognitive aspect of SIDE mode:

In summary, the SIDE model incorporates the social identity theory indicating that when individuals are categorised into groups, it firstly results in the members shifting their identity from *I* to *we*. Secondly, the interests of the group become the interest of the individual instilling an in-group favouritism in order to maintain a positive social identity and strengthen the self-esteem of the individual (Reicher, et al., 1995). Lastly, when the group is in the presence of other groups, it will cause the characteristics of the group to become salient. Social influence, then, is a willing process of social definition within a group (Reicher, et al., 1995).

Cognitive aspects of the SIDE model are also known as the categorisation aspect, referring specifically to the depersonalisation process of enhancing the salience of group identity (Spears & Postmes, 2015). This process of depersonalisation does not refer to the loss of identity but rather it refers to the higher levels of inclusiveness and the identity-sharing of the crowd. Behaviour, then, is not due to an unconscious loss of discriminations nor the lack of self-monitoring behaviour and suggested collective inhibition, but wilfully regulated behaviour depicting group standards and norms to enhance a salient group identity.

Furthermore, the anonymity of the crowd allows for social identity to be heightened. Considering the accentuation effects of social identity theory and the lack of personalising cues provided through anonymity, less attention is given to the difference of individuals in a group and more to the similarities (Reicher, et al., 1995). Anonymity does not, then, result in a lower sensitivity to group norms; but a higher sensitivity that evokes social behaviours. These behaviours can be of positive or negative features, depending on the group norms (Reicher et al., 1995).

To conclude, the cognitive dimension of (SIDE) argues that, under conditions of group immersion, the anonymity provided by virtual reality will provoke the individuals into a greater emergence of social identity leading to anti -normative forms of behaviour and self-expression (Spears et al., 2002). This provides an explanation for individual's behaviour in a virtual reality environment. They do not lack identity or moral reasoning (as argued by the Deindividuation theory) nor do they display their own identity and moral reasoning within a social context (as alluded to by the embodied social theory) but rather form a new social identity which allows for the emergence of a new form of moral behaviour.

Strategic aspect of SIDE model:

The social identity theory further indicates that members are grouped according to different categories such as race, occupation and interests. Individuals will have multiple social identities as they categorise themselves in more than one group. Individuals, therefore, will not view themselves as possessing one social identity but several identities. The strategic aspect of SIDE argues that the depersonalisation of anonymity can also affect the ability to express other social identities (Klein, Spears and Reicher, 2007).

The behaviour of an individual, or the identity performance as explained by Klein et al. (2007), is dependent upon the consideration of available audiences. For example, multiple audiences will result in attributes of other social identities becoming salient and enhance the performance identity of anti-normative behaviour. An example provided by Klein et al. (2007) is that of a Muslim women dressing in Western clothes. In terms of her Muslim social identity, this is anti-normative behaviour. She is, however, not necessarily acting against her Muslim identity rather, through identity performance, adhering to a shift in what defines her as Muslim (Klein et al., 2007). This strategic behaviour allows for the forming of new norms and identities in which members may redefine expectations and structural norms.

Likewise, anonymity within a virtual world provides protection from judgement facilitating the freedom for multiple social identities to emerge, despite the norms of the in-group (Spears & Postmes, 2015). Another example is a study whereby students (a lower status group) admitted to unacceptable behaviour, such as cheating, to staff (high status group) whilst under visual anonymity. Their private identities were protected, thus providing them with the freedom to express their normative behaviour as a student (Spears & Postmes, 2015). From the first example, the strategic aspect indicates that anonymity provides the protection to express unaccepted, anti-normative or immoral behaviours, and the second example highlights the expression of in-group normative and out-group unaccepted behaviour.

Further, when individuals have a negative social identity, the strategic aspect of SIDE alludes to the fact that the individual may strategically relinquish their social identity. They will see the group boundaries as permeable and attempt to move between groups (Klein et al., 2007). The behaviour of the individuals will then reflect anti-normative characteristics and immoral behaviour towards the in-group; but normative characteristics towards the out-group as they are attempting to strategically shift their social identity. This behaviour can be considered immoral to the in-group due to the discrimination against out-group members; however the out-group may be reluctant to accept a new group member (Klein et al., 2007).

Behaviour: an expression of identity

Both dimensions of SIDE offer explanations for behaviour within virtual reality. The difference in behaviour when compared to face to face interaction lies fundamentally in the regulation of behaviour (Klein et al., 2007). In terms of the cognitive aspect, behaviour is regulated by the norms of the immersion group. Individuals behave in favour of the group in order to enhance their social identity and personal self-esteem. In terms of the strategic aspect, the depersonalisation of anonymity allows for strategies which attempt to shift the norms of the social identity, express unaccepted normative behaviour or act in accordance with the out-group norms in order to shift social identities.

It is, then, evident that behaviour and identity are inherently linked. Behaviour is geared toward serving the enhancement and maintaining of social identity (Reicher, et al., 1995). Additionally, behaviour is strategically used to modify one's social identity. Behaviour, then, can be considered an expression of identity. This contradicts Deindividuation theory as it does not allude to behaviour being caused by identity loss and individual rationality, but

rather by the expression of social identities. It is not the external individual behaviour that is of interest in virtual reality, but rather the identity-defining process through collective interaction which influences external moral behaviours.

4. Context: Minimal group paradigm

This leads to the research question of this study: What are the social constructions of a virtual reality? Are these constructions due to the loss of identity, or is it due to an expression of a social identity? In order to begin to provide answers to some of these fundamental questions, a discussion of the simplest, minimal forms of interaction needs to take place. This study is, therefore, conducted within an adaption of the Minimal Group Paradigm (MGP) studies conducted by Henry Tajfel and his colleagues in the 1970s.

As a means of elaborating upon the current knowledge of intergroup behaviour, Tajfel was one of the first to use a minimal group paradigm to explore the connection between intergroup bias and social categorisation into the in-group or out-group (Griever and Hogg, 1999). Studies focused on intergroup behaviour and resulted in the conceptualisation of the social identity theory (Billig and Tajfel, 1973). These studies were unique in that they aimed to remove all variables linking to in-group behaviour (Tajfel, 1978). They therefore, aimed to establish what the minimum conditions under which participants would display intergroup favouritism and out-group discrimination were. These variables included no face-to face interaction and no personal history.

The first minimal group study by Tajfel et al., (1971) consisted of two phases. In the first phase, participants were randomly divided into two groups through a selection preference of either abstract painting by the artist Kandinsky or Klee. This form of categorisation was the only common factor between the individuals in their groups (Diehl, 1990). It was argued that this trivial form of categorisation, within a minimalist environment, would be enough to obtain group membership and competition between groups.

Once categorised, the participants were then placed into individual cubicles and given a booklet informing them that they would be distributing real money to a member of the in-group and a member of the out-group. Different allocation options were provided to them with matrices as shown in Figure 2.1. The matrices consisted of two rows of fourteen numbers of different weighted values (Tajfel, et al., 1971). One row represented the in-group and the other the out-group. The participant would select one allocation column per row thus

indicating how much money the in-group and out-group would be distributed based on their choice. These matrices consisted of different allocation strategies: fairness, maximum joint benefit, maximum in-group benefit and difference in favour of the in-group (Tajfel, et al., 1971).

Figure 2.1: An example of matrices from Tajfel 1971

A	Matrix 1	-19	-16	-13	-10	-7	-4	-1	0	1	2	3	4	5	6
		6	5	4	3	2	1	0	-1	-4	-7	-10	-13	-16	-19
	Matrix 2	12	10	8	6	4	2	0	-1	-5	-9	-13	-17	-21	-25
		-25	-21	-17	-13	-9	-5	-1	0	2	4	6	8	10	12
B	Matrix 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14
		14	13	12	11	10	9	8	7	6	5	4	3	2	1
	Matrix 4	18	17	16	15	14	13	12	11	10	9	8	7	6	5
		5	6	7	8	9	10	11	12	13	14	15	16	17	18
C	Matrix 5	-14	-12	-10	-8	-6	-4	-2	-1	3	7	11	15	19	23
		23	19	15	11	7	3	-1	-2	-4	-6	-8	-10	-12	-14
	Matrix 6	17	14	11	8	5	2	-1	-2	-3	-4	-5	-6	-7	-8
		-8	-7	-6	-5	-4	-3	-2	-1	2	5	8	11	14	17

The minimal group findings:

The outcome of these studies indicated that the participants were more interested in a maximum difference (in-group favour) between the two groups than maximum profit. They would rather allocate less money to their own group, as long as it was the maximum difference that could be obtained between the two groups group (Tajfel, et al., 1971). This indicates a desire to maintain a positive comparison between the two groups. It also indicates that, although there was a strong in-group bias toward their own in-group, participants tend to discriminate against the out-group group (Tajfel, et al., 1971). This behaviour is critical in maintaining a positive social identity.

Moreover, according to Tajfel (1972), this behaviour is a result of shared meaning and experiences amongst participants which regulates and determines its expressed form. For instance, in conditions of fairness the norm within the group will influence behaviours of co-operation. Thus behaviour will be influenced in occurrence to the values and morals of the

normed condition of fairness (Tajfel, 1972). This demonstrates that social conduct is dependent on the social situation in which individuals are placed. The norms of their social identity will determine their moral behaviours. Thus, behaviour is an expression of a formed social identity and is used as a social motive and a strategy to maintain one's position and positive social identity within the group (Tajfel, 1972).

Limitations of the minimal studies

A number of limitations exist within the minimal studies. Firstly, the decisions were based on a once off allocation of tokens rather than through an evolving social interaction, such as that within a virtual reality. Doosje, Spears, Ellemers and Koomen (1999) identify group cohesion as a process that becomes more prominent over time. They argue that time has an effect as it allows for interaction between the group and the members. It is evident through these studies by Doosje et al., (1999) that as the group members interact with one other over time so their identification with their group increases.

Secondly, the minimal studies were not conducted within virtual reality. Although anonymity was provided to participants of the minimal studies, the variable of a computer medium needs to be incorporated in order to discover the behaviours particular to virtual contexts.

Lastly, these studies were mostly quantitative measures and did not consist of any qualitative attributes such as participant's explanations of their choices and decisions. Other than the indication of social identity and thorough in-group favouritism, there were no discussions providing insight on the extent of this social behaviour and its impact on group member's behaviour.

5. The virtual interaction application (VIAPPL)

In summary, the minimal studies provided a simplistic environment in which to measure the effect social identity has on behaviour. In order to determine if behaviour in a virtual reality is due to social identity, the minimal studies would need to be adapted into a virtual environment. This has been accomplished through the development of a computer-mediated program called a virtual interaction application (VIAPPL) (Durrheim et al., 2013). This software platform allows researchers to conduct lab-based experiments in social interaction, whilst maintaining experimental control, thus allowing for natural responses (Durrheim, Quayle, Titlestad and Took, 2013).

Further, VIAPPL allows for interaction in different contexts and conditions. This in turn allows for the formation of different social identities through which the emerging moral behaviours relating to the group's shared meaning and experiences can be explored. The argument that behaviour is a social motive of defining and expressing identity is thus supported. By incorporating the variable of time, VIAPPL takes into consideration group familiarity and increasing group identity which reflects more accurately the virtual environment.

More fundamentally, at least in relation to this research, VIAPPL provides the context and platform, from which participants can discuss their behaviour in the game, indicate their expectations, justify their behaviour and comment on their norms displayed through their interaction.

Conclusion

From the above literature review, it is evident that some scholars describe online behaviour as, immoral and uninhabited. The Deindividuation theory argues that a similar anonymity for individuals to that found in a crowd prohibits self-evaluation and rationality resulting in a "loss" of identity. The responsibility for behaviour is then no longer the individuals but the groups – allowing for uninhibited behaviours (Postmes & Spears, 2013).

The embodied social presence theory, on the other hand, indicates that these behaviours may not be due to a loss of identity. It argues that, although interaction is not through a physical presence, virtual reality may cause an individual to be more responsive to social cues as they are more psychologically aware of other's immediate involvement in collaborative goals. This results in socially enriched and expressive behaviours in virtual reality. This theory, however, simply alludes to a social inhibited presence of individual and does not provide an explanation for the immoral behaviour observed within virtual reality.

The SIDE (cognitive) model highlights that virtual interaction consists, rather, of a shared identity that affects the salient behaviour of an individual when amongst out-group members. Further, the SIDE (strategic) model suggests that anonymity provides agency to group members in refining norms within the in-group without fear of peer judgement. This allows for un-normed and immoral forms of behaviour to emerge which, the theory argues, is an expression of identity.

It is within this context that this research project aims to explore the moral behaviour of virtual interaction and determine whether it is due to a loss of identity or an evolving social identity. VIAPPL's inclusion of the minimal group paradigm provides a platform to explore this question. It allows for the incorporation of multiple conditions allowing participants to express and influence social identity according to the context in which they have been placed. Moreover, the qualitative contribution provides insight into the participant's justification of their behaviour, constructs, elements of meaning-making and the extent to which their behaviour was in accordance with their expression of social identity.

Aims and rationale

Computer mediated interaction has become a popular mode of entertainment and communication. Questions have arisen around the different forms of behaviours emerging from virtual realities and are currently being investigated by social psychologists (Biocca & Harms, 2002). The theoretical framework provides a rationale for this project as it questions the behaviour observed in a virtual environment and its relation to the construction and expression of identity.

This study aims to examine the construction of one's identity as well as the social agreement of the construction meaning within a virtual reality and the effect it has on behaviour. Moreover, it will analyse the talk of participants and their justifications for their perceived immoral behaviour. Through this analysis it aims to determine that behaviour is an expression of identity and is influenced by the way in which the context is interpreted. Further, as explained by social identity theory, behaviour is intensified due to the influence of belonging to a group. It will therefore, argue that virtual behaviour is not due to a loss of identity but rather that a shift from individual identity to a social identity results in behaviour becoming salient.

The minimal group paradigm provides a minimalist form of interaction, allowing the participants to construct their own interpretations of a virtual reality thus alluding to their experiences and meaning of this environment. By means of this, the study aims to uncover the constructed meaning and attributes of the individual's experiences of anonymity and the effect it has on the formation of identity.

Chapter 3: Method

1. The VIAPPL game:

The data of this study consists of interviews about the VIAPPL game. This game consists of several different conditions to the VIAPPL game as demonstrated in Table 3.1. The participants played the game either as part of a group or individually. These conditions also had two economic settings: inequality and equality.

In the group condition, the participants were led to believe their placement into either the green group or purple group was based on the choice of two paintings on the screen when in actual fact the placement of participants into groups was entirely randomised and had no determining factor. Each participant was represented as circle. Each group was allocated a different colour. The participant was able to identify themselves as they were marked in bold whilst the others were anonymous (see Figure 3.1).

Participants were then presented with the preference task, in order to categorise them into their groups. They were not aware that the categorisation was, however, not according to this preference but random. Once the participants were in the groups, there was a practice round.

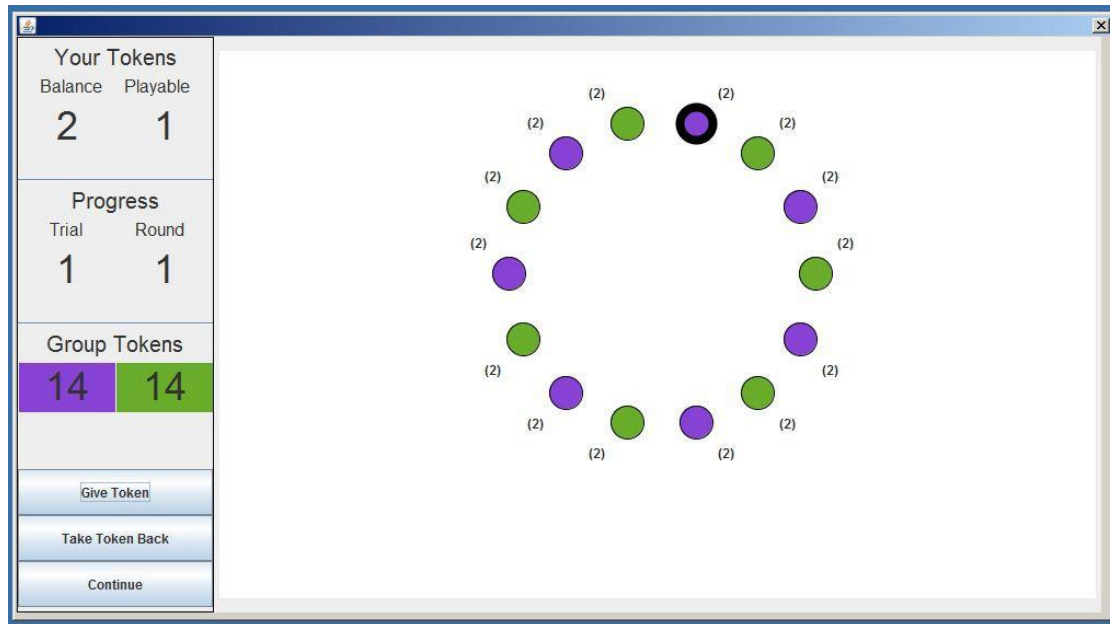
The procedure of the game began with the experimenter put on a white lab coat as a means of establishing authority with participants and so that the power dynamics were in favour of the experimenter. After participants were recruited; they arrived at the psychology laboratory (PSYCLAB) and the right index finger of individual was scanned to ensure they had not participated before. They were then allowed to enter the PSYCLAB. After all participants have arrived, the experimenter read through the information sheet and participants were asked to sign the consent form (see Appendices A and B).

Once the participants had read and signed the consent form, they began with the trial round. This was completed whilst guided by the experimenter. They were then instructed to complete another trial independent of guidance from the experimenter. Once all participants understood what was expected of them, the game of 40 rounds began. After the game was played, they were given their incentive based on the number tokens they ended with, as explained in the information sheet (Appendix A).

Table 3.1: Conditions of games

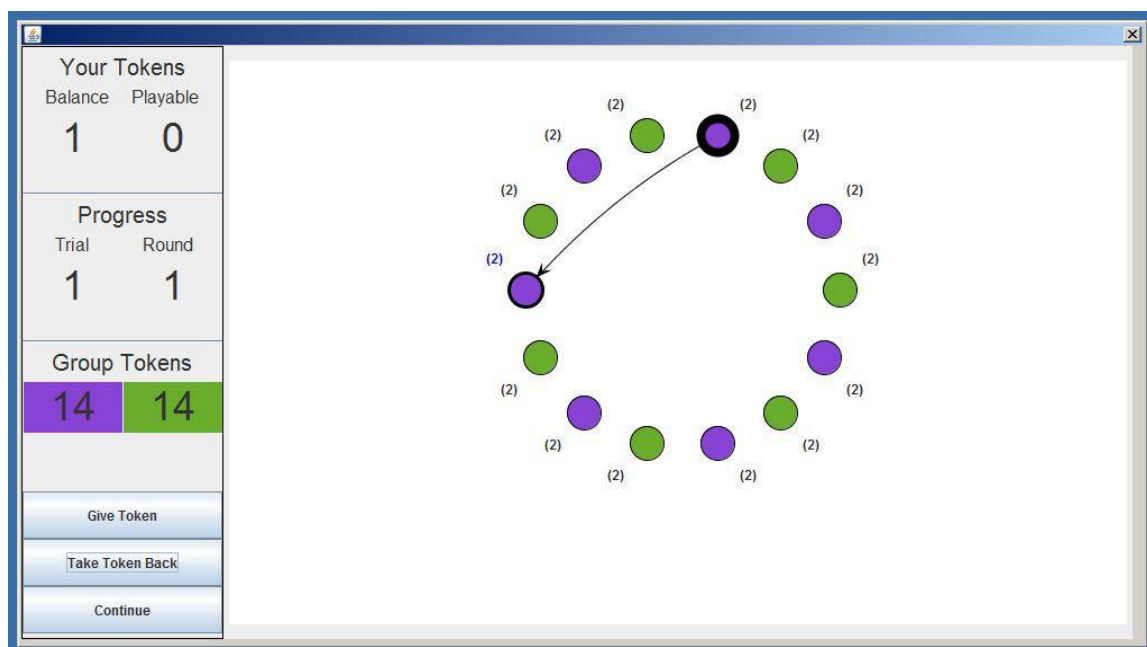
	Individual condition	Group condition		
	<i>No groups</i>	<i>Two groups (equally sized)</i>	<i>Two groups (unequally sized)</i>	<i>Three groups (equally sized)</i>
Equality condition	14 players, 20 tokens per player, 4 replications	14 players, 7 in each group, 20 tokens per player, 4 replications	none	18 players, 6 players in each group, 20 tokens per player, 3 replications
Inequality condition	14 players, 7 players of each status, high status (30 tokens per player), low status (10 tokens per player), 4 replications	14 players, 7 players each group, high status (30 tokens per player), low status (10 tokens per player), 4 replications	14 players, 4 in minority group, 10 in majority group, minority group (38 tokens per player), majority group (12 tokens per player), 4 replications	none
Flat Inequality condition	none	none	none	18 players, 6 players in each group, high status (30 tokens per player), other 2 groups (15 tokens per player), 3 replications
Ranked Inequality condition	none	none	none	18 players, 6 players in each group, high status (40 tokens per player), middle status (30 tokens per player), low status (10 tokens per player), 3 replications

Figure 3.1: Self representation



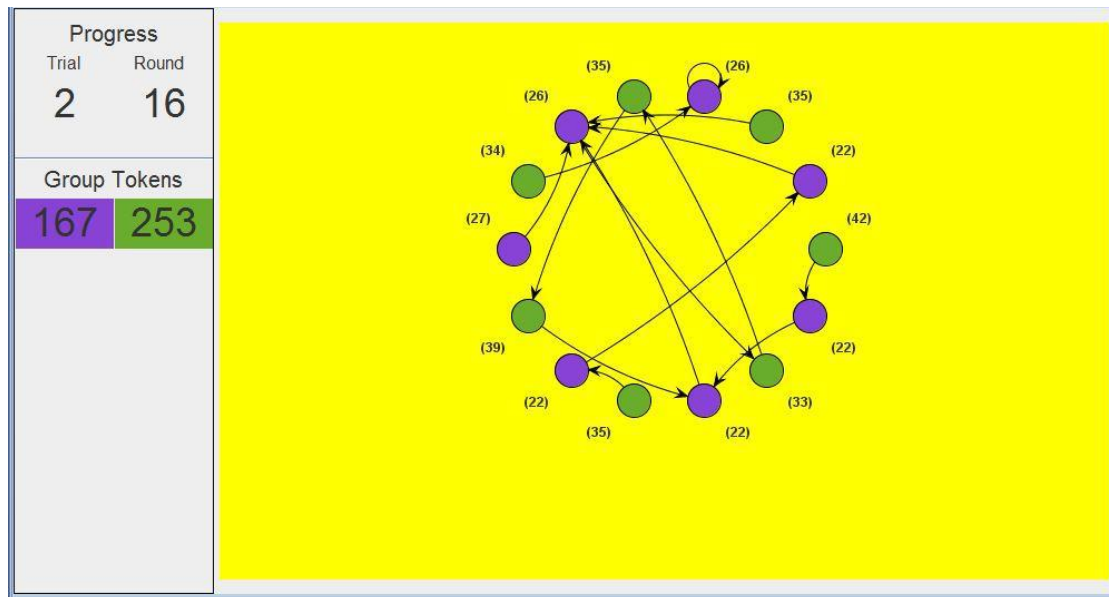
The game consisted of 40 rounds in which each participant would allocate a token to whomever they liked as demonstrated in Figure 3.2

Figure 3.2: Token allocation



The round number, their personal token balance and the group balance was displayed on the left of the screen. After everyone had made their allocations, a round moves screen appeared indicating who everyone distributed their tokens to, as seen in Figure 3.3.

Figure 3.3: Round moves screen



2. Design:

This study uses a qualitative, social constructionist design. A qualitative research design is used in order to make sense of participants' understandings of reality (Holliday, 2007). Qualitative research is a research approach in which the aim is to describe and understand human behaviour from an insider perspective (Babbie & Mouton, 2001). This form of research is especially useful as it generates rich data and detailed descriptions (Willig, 2001). Moreover, qualitative research is a tool which provides insight into the social construction of society and the understandings and insights of how society develops subjective, meaningful experiences (Blanche, Durrheim & Painter, 2006).

Social constructionism argues that meaningful experiences are formed through continuous interaction between individuals in the world (Burr, 1995). It argues that everything in society is interconnected and that all knowledge, meaning and understanding exist according to the social context in which it occurs (Burr, 1995). Human mentality and capacity is, therefore, not individualistic, but rather the thoughts, processes and functions of humans are based on social structures of interaction. Moreover, constructionism emphasises that all human interaction and knowledge is constituted in and through language. Language thus becomes the focus of study as it reveals the underlying constructs of reality (Blanche, Kelly, Durrheim, 2006). This design suits the study as it aims to look at the construction of meaning between

individuals that are interacting within a virtual environment (Blanche, Kelly, Durrheim, 2006).

Conversation analysis is a qualitative method grounded in the assumptions of social constructionism as it focuses on language. This form of analysis is used to examine language as a means of revealing the underlying constructs of reality. Conversational analysis stems from the sociological tradition of ethnomethodology (Baker 2003). Ethnomethodology focuses on how participants accomplish things through conversational interaction. These accomplishments include creating meaning, negotiating identities and connecting their different worlds through interaction.

Further, it focuses on people's account of experiences within different situations (Baker 2003). These accounts are used for understanding people's experiences as the talk is centred on explaining, justifying and describing their account of what occurs in any given situation (Baker 2003). Similarly, conversational analysis was developed to study the structure and process of creating meaning through the interaction of talk (Peräkylä, 2003). The design of this study, therefore, was a qualitative, social constructionist design in which conversational data analysis of participant's interactional talk was used to reveal the underlying constructs of their reality in a virtual environment.

Information was attained from conversations of the research participants who took part in the VIAPPL game. The Virtual Interactive Application used in this study was designed by Durrheim, Quayle, Titlestad and Took (2013). VIAPPL is a computer based programme of the token allocation instrument used in the Minimal Group Paradigm (MGP) studies conducted by Tajfel and colleagues during the 1960's – 1980's (Durrheim & Quayle, 2012). VIAPPL is a versatile application that can be manipulated to create various conditions that incorporate the discussed extensions of the minimal group studies (Durrheim et al., 2013).

3. Sampling:

Convenience sampling, a form of non-probability sampling, was used to recruit the participants for this experiment. The convenience sample method is the easiest method of access to participants (Terre Blanche, Durrheim, Painter, 2006). This method of sampling is advantageous in that it is inexpensive and does not require a long time to recruit participants. Participants were recruited between July and September 2014.

Participants were not selected according to specific race or gender. All participants were approximately in the age group 18 – 25 years as all participants were university students from the University of KwaZulu-Natal. Groups of 14 or 18 participants were recruited at each game depending on the number needed for each game category. A total of 308 participants were recruited. There were 20 games in total (7 games of 18 and 13 games of 14 participants).

4. Data collection:

Once the participants had played the VIAPPL game they participated in semi structured focus groups. A focus group is an interview that is conducted when people have shared a similar experience (Terre Blanche et al., 2006). The questions in the focus group were semi-structured in order to not restrict the discussion (Terre Blanche et al., 2006). The questions used in the focus group were as follows:

- What did you think of the experiment?
- What do you think the game was about?
- Did anything in the game catch your attention?
- How did you choose to allocate your tokens?
- Any other comments?

Other comments in the focus group included the facilitator responding to the participants and repeating their comments back to the rest of the group as a question. The focus group had no time limit and continued for as long as the group wanted to discuss the game. They lasted on average between 7-9 minutes. The focus group was recorded and transcribed for analysis. The transcripts were 3-4 pages long and were transcribed using a Jefferson lite system of transcription notation (Appendix C). This type of transcription captures what was said as well as the way in which it was said, demonstrating the complex interaction and turn-taking of the conversation (Jefferson, 2004).

5. Data analysis:

The technique of discourse analysis with conversational analysis was used to analyse the transcripts from the focus groups. It is a method for investigating the structure and process of social interactions. The foundational aspect of conversational analysis is that talk is not merely communication, but action. People are doing things with their talk (Drew, 2015).

Further, it focuses on the outcome of the conversation and how meaning is created through talk (Peräkylä, 2003). Through talk, therefore, context is built. Moreover, talk exists within a context of presumed mutual understanding between the individuals (Drew, 2015). It is, then, both a process as well as a product of the context in which it is constructed (Heritage, 2005).

Drew (2015), outlines five main objectives of conversational analysis. First, it focuses on how participants respond to one another in their turn of talk and the collective understandings between their talk. Heritage (2005) emphasises the importance of turn taking in responding and the effect it has on interaction and meaning of talk. An example of turn taking is a formal setting of questions and answers whereby each will wait to respond or wait their turn to speak.

Second, conversational analysis provides insight into the institutional dynamics of the conversation, such as the positioning of identity or societal attributes (religion or politics). The use of “we” instead of “I” for example, places the person’s identity beyond own identity to a greater social identity (Drew, 2015, Heritage, 2005).

Third, it underlines the social action of talk and how different actions are produced to accomplish other actions. Heritage (2005) demonstrates how the action of the talk has its design in the structure of the turn. For example, if a statement is interpreted as attacking, the response may be designed as defensive in order to accomplish an action of justification.

Fourth, it focuses on a particular action of a participant and how this is accomplished. This is evident in the sequential organisation of a participant’s talk. For example, a question can simply be answered by either “yes” or “no”; however by answering yes and then following through with a particular position to justify their answer a participant’s talk accomplishes a further action.

Lastly, conversational analysis focuses on how the talk relates to a social context. This includes the context within the conversation, such as the relationship between the participants, the setting in which they are placed and how this influences the conversation. The underlying attribute of conversational analysis is, therefore, to attempt to capture the meaning of the “back and forth” talk which makes up a conversation and the account of each person’s position established through this interaction.

6. Ethical considerations in the procedure:

During the course of the experiment it was not foreseen that participants would experience any harm, risk or damage as a result of their participation. Each participant was asked to complete an informed consent form which included consent to have the focus groups recorded and for the data to be used for future analysis. The form stated that if participants wished to withdraw at any point, they could do so without completion of the experiment. The confidentiality of participants was ensured as they did not have to provide a name or any other form of identification and their registration onto the virtual social network was entirely anonymous with no way for the other participants to know who was in their group.

There was a mild deception used in which the participants were informed they were placed into their groups through a bogus selection. They were however, placed into their groups through random placement. During the focus group, no harmful or hurtful questions were asked. The participants were not forced or coerced to answer any questions and were free to stop the focus group process at any time. This project was approved by the humanities and social science research ethics committee at the University of Kwa-Zulu Natal (see appendix D).

Chapter 4: Results

This data analysis will focus on how the participants constructed their accounts of the VIAPPL game. The talk within the focus groups across the data was centred on their actions and behaviours within the game. As discussed in the literature review, behaviour is an expression of the meaning constructed in a particular situation. What is of importance here, is not what the participants did in the game, but rather what meaning they attached to that behaviour and what constructs were created in order to justify that behaviour. This data analysis will focus on what meaning of the game the participant constructed and that which influenced their behaviour.

The participants demonstrated that within a minimalist environment of no previous interaction or established norms; they draw from their previous experiences and understandings to construct the meaning of the virtual environment. This was evident in the data, as they provided clear answers of what they understood the game to be about despite the game being meaningless. Moreover, from this meaning making, they then attached moral behaviour to those constructs as what is right and to be expected within those conditions.

1. Making meaning: real world to virtual world:

Extract 1.1: 31 July Group Equality (E2G03)

- 39 F what do you think the game was about↑
- 40 P2 it could be distribution of wealth, distribution of
- 41 P2 =equality, but I thought it was distribution
- 42 F did anyone else think something?
- 43 P5 I think it eh (.) its more or less to see how does
- 44 P5 =the society think as a whole. Like more like giving
- 45 P5 =to the poor and whatever whatever. What is their
- 46 P5 =mentality toward money and all that. Like (.) if,
- 47 P5 =do we think <the wealth must be spread equally
- 48 P5 =amongst us all> like or no it must be kept between
- 49 P5 =the two guys; the rich guys, °those two guys°

In this extract participant 2 isn't able to place a direct link to wealth, but indicated that he constructed the game to be about the distribution of tokens. Participant 5 also links the meaning of the game to a global representation of society and how the people behave. This participant constructed the opinion that whatever people's beliefs on wealth are, will affect their decisions in the game. If you believe you must give to the poor, you wouldn't have given to those with more but rather to those with less. This has the effect of judgement in its talk as by not giving to those with less in the game; it indicates that you don't care for the poor.

Extract 1.2: 6th August 2014, Inequality flat group (IF3GO2)

- 97 P8 what caught my attention, I kept looking if they'll
 98 P8 =go down, they didn't go down, it moved from 164 to
 99 P8 =178 and then the pink was like 168
- 100 P4 [ya we are strong, we so strong
- 101 P5 yeah we were strong, we were like Caster Semenya
 102 P5 =you know she's always number 8 and then she comes
 103 P5 =up

This extract indicates that the participants applied a meaning of competition, but a race in particular to this game. Participant 5 uses Caster Semenya, a famous Olympic athlete, as an example of how they played the game as it was a race to finish and finish strong. This participant is drawing from meaning and illustrations of the real world to conceptualise the virtual world.

Extract 1.3: 30 July 2014, Inequality Group (I1G02)

- 94 F and how did the group that had a lot of tokens feel?
 95 P2 rich
 96 F how did the rich group feel about the poor group?
 97 P2 I felt sorry for them, that's why I was trying to
 98 P2 help

This extract also indicates that meaning was attached to the tokens. Participants conceptualised the tokens as money and having worth. Their interactions were therefore not only a distribution of inequality, but a wealth and power distribution of inequality. This construction allowed for actions to carry more substance, as members were not only giving to those with less, but were giving to the poor – thus amplifying the moral behaviour.

Extract 1.4: 31 July, Group Equality (E2G03)

10 P2 because it is like (.) they were exchanging tokens
 11 P2 =among themselves like everyone else, even I, if I
 12 P2 =give you my one coin, you give it back >and then<
 13 P2 =those guys don't give it back. It is like in South
 14 P2 =Africa (.) with the corruption and eish, and eh
 15 P2 =Jacob Zuma they get something and they don't give,
 16 P2 =exchanging the money between themselves, exactly.

This extract depicts how participants understand what happened in the game as a representation of what is happening in the real world. This participant uses a political stance, to explain forms of co –operation in the game in order to explain the immoral behaviour witnessed. He draws from his world experience to explain to virtual world experience.

As shown from the above data, it is evident that the participants made meaning out of a minimally meaningless environment by drawing from real life experiences. They drew from the real world and attached illustrations of power, wealth and competition to conceptualise the way in which different members played the game. Through this meaning making, the participants then constructed different forms of norms and expected moral behaviours. Different forms of moral behaviours that aligned with the different constructions emerged within the game.

The moral behaviours constructed fell within two main themes; individual self gain versus overall fairness, and group competition versus group equality and inequality. The first theme is within an individualist condition. The themes demonstrate a debate between participants on whether there is a moral inclination towards cooperation and equality, or whether the game was a strategic opportunity for self gain. The second is within the group condition. The groups constructed the game to be either one of competition, where the aim is to gather as

many tokens as possible within your group thus winning the game, or a game of equality, where the aim was to keep the distribution of the tokens between the groups equal.

2. Individual self gain versus overall fairness

2. 1 Overall fairness

The individual condition attributed to a construction of overall fairness, whereby the tokens should be distributed to those who had less. This construction of the game influenced the behaviour of participants to give a token to those that had the least in the game. This is evident in this data in terms of a justification of their behaviour in relations to their construction of the game.

Extract 2.1.1:29 July 2014, Inequality Individual (I102)

- 26 F okay, so how did you choose to allocate your tokens
- 27 P4 I just gave my tokens to the ones that had the less
- 28 P4 =tokens
- 29 Some [yeah
- 30 P4 just to:: bring them up ↑ yes

This first extract demonstrates the construction of co-operation and overall fairness in the game. When asked how they chose to allocate their tokens, they answered that they gave to those that had the least. The lengthening of the word “to” emphasises the justification of participant 4’s behaviour, and highlights his construction of the need for equality. This is agreed with in collaboration by other participants as they agreed by speaking over him.

Extract 2.1.2: 5 August 2014, Inequality group (I2G04

- 8 F so what did you think the game was about
- 9 P2 morals
- 10 F morals, why did you think that
- 11 P2 so the thing is (.), if you had more tokens↑ there
- 12 P2 =were number which were so long and you felt that
- 13 p2 =you had to give it away to them

This short extract demonstrates that one participant understood this to be a game about morals. In his talk, he says that he knew that if he had a certain amount of token, he should be giving them away. The emphasis on the word “had” in line 13 indicates that he may have not wanted to give the tokens away, but he had to do it as he was governed by a higher morality than his desire to get more tokens

Extract 2.1.3: 29 July 2014, Inequality Individual (I102)

- 37 F how did you allocate your tokens↑
- 38 P6 if someone allocated to me, I would give back to
- 39 P6 =you. If you did not allocate, I wouldn't. To me it
- 40 P6 =felt like bring and share here, so:: its fine
- 41 P1 ya, I gave to the lowest
- 42 P7 [to the lowest, to catch up
- 43 P1 ya, good Samaritans

This extract further demonstrates the construction of co- operation and fairness as participant 6 constructs fairness in terms of reciprocal relationship. The terminology “bring and share” is a phrase used for social events (such as lunch), where everyone will bring whatever they have and share it communally. She constructed this game then as an environment of relationship where she would give to those who gave to her and they would share resources amongst themselves.

Participant 1 and 7 interprets her talk, and add that they gave to the lowest the in group, in order for them to catch up and maintain the equality amongst the group. It appears that they have understood her talk of a reciprocal relationship to also representing a kind of equality that they were constructing in the game.

Participant 1 further emphasises this notion by linking the action to being a biblical reference of a Good Samaritan. Not only does participant 1 construct a game of equality, but by linking the maintaining of equality to being a Good Samaritan it allows the action to carry a heavy weight of a Godly and right thing to do. Moreover, this biblical reference indicates the expected moral behaviour of the participants within the game

Extract 2.1.4:25 July 2014, Equality Individual (E103)

- 14 F how did you choose to allocate your tokens↑
- 15 P1 I gave the ones who gave me
- 16 F so you were giving people who were giving you↑
- 17 P1 sometimes
- 18 P2 [people that short
- 19 F so you gave people who had less↑
- 20 Some ya, less
- 21 F so did anybody choose a different strategy↑
- 22 P3 what did he say↑
- 23 F he said he gave people who had fewer tokens
- 24 P3 oh::(.) I used that where I would see there is no P3
- 25 one and then also that when I felt like I have given
- 26 P3 everyone than I will be fair (.) to everyone. How
- 27 P3 can I give to everyone↑ the next round, everyone
- 28 F did anything happen in the game that caught your
- 29 F =attention

Different accounts of what the participants have constructed fairness to be are evident in this extract. In line 2, participant 1 is saying that he gave to people that gave to him (an act of fairness/equality), where participant 2 is interpreting his talk saying he gave to those who had less (a different act of fairness/equality).

This action is agreed with by other members in the group. Participant 3 elaborates on both accounts indicating that she would give to people in the rounds that they gave to her, but if she didn't receive (line 11) then she would give to those with less, thus acting in both constructed forms of fairness. This indicates that different reactions from the participants are dependent on different conditions presented in the game. Further, it appears from her talk and

her emphasis on the word fair and everyone (line 13) that she constructed fairness to be giving of her tokens to everyone equally, not just those with less.

Extract 2.1.5: 29 July 2014, Equality Individual (E103)

- 43 F how did you choose to allocate your tokens
- 44 P9 randomly
- 45 F randomly↑
- 46 P9 at first
- 47 P10 [no, if someone is giving me a token, I would give
- 48 P10 =it back
- 49 P11 I gave to the less fortunate
- 50 F gave to the less fortunate

Similarly, in this game, the participant account to different attributes of fairness. The first is fairness in terms of reciprocation, and the second is fairness in terms of the distribution of tokens equally by giving to those with less. It appears from both extracts of talk that the group is constructing the one form of the fairness with the other, as in both incidents when a participant gives an account of fairness in terms of reciprocation, another participant then alludes to their account of fairness in terms of distribution to the “less fortunate”. Moreover, by using the terminology “less fortunate”, participant 3 is positioning himself as kind and generous and this terminology has concentration of poverty and giving to the poor.

In conclusion, three different forms of overall fairness were constructed in the game. The first was with relation to a reciprocal relationship. This is when fairness was conducted as giving back a token when one was received. The second was in relation to giving to those with less in order to bring them up, thus creating an overall equality and fairness within the group. This act was constructed as an act of kindness and the “right” thing to do. The third construction was in relation to participants giving to everyone equally despite their current amount of tokens. Despite this construction of overall fairness however, it is evident from the participants talk in the data that within the individual condition of the game, a more prominent construction of the games was an individual self gain.

2.2 Individual self gain

In the individual condition there was also a construction of competition and self gain. Within the game there was an option to self allocate a token instead of giving it to other group members. This caused controversial conflicting opinions between participants as some constructed this action to be a selfish action (wanting overall fairness), where, more often, others constructed this action as a smart strategy for winning. The intentions in this strategy in the game were used for a competitive, self gaining method of collecting as many tokens as possible.

Extract 2.2.1: 29 July 2014, Individual equality (E103)

- 10 P4 I think you had to be really observant in this game
- 11 F why did you have to be observant
- 12 P4 because you if you looked closely you would have
- 13 P4 =noticed that some people did not give away tokens,
- 14 P4 =>they gave tokens to themselves <
- 15 P5 [strategy
- 16 P4 so if somebody gave them tokens it would be a
- 17 P4 =greater benefit >cause it they did not give away
- 18 P4 =tokens, they gave to themselves< they did not lose,
- 19 P4 =but they win. But if you notice that earlier
- 20 P5 [ya
- 21 P6 the trick was to give tokens to yourself all the
- 22 P6 =time. Because other people did not know that they
- 23 P6 =can give tokens (.) to themselves so they just
- 24 P6 =kept giving around. After a while you had like 10
- 25 P6 =or some(h)thing left
- 26 Some haha

This extract indicates how some participants saw self-giving as a smart strategy for winning. Participant 6 is saying that it was a trick, a secret strategy for winning. Participant 4 identifies that this option was not an obvious thing to do as the participants were not aware in the beginning of the game that they were able to give to themselves. It was a strategy that was discovered whilst the game was being played. Participant 4 is identifying that by being observant and realising that you could give to yourself tokens, it would put you at an advantage. These participants have constructed this “trick” and a smart advantage in the game that adds benefit to their construction of competition. Moreover, they appear to look down at those who did not discover this trick as participant 6 in line laughs at them for being left with a few tokens (line 25: some(h)thing). He constructs this action as a smart strategy for winning the game

Extract 2.2.2: 29 July 2014, Inequality individual (I102)

- 98 F okay how do you feel when people self gave↑
- 99 P5 I felt like they were cheating
- 100 P6 [betrayed
- 101 P7 I felt like it was a smart thing to do (.) you know
- 102 P7 =when you have the original amount that you had,
- 103 P7 =like 11 it means people haven't been giving to you,
- 104 P7 =you have just been giving away.

Participant 5 uses the word “cheating” for the action of self giving, indicating that he views self giving as an immoral action in the game. Participant 6 interrupts him and extends his criticisms that not only was it cheating but it was a form of betrayal against the other players. Moreover this extract shows a debate between the participants on the construction of the game as participant 7 argues that self giving it was actually a smart thing to. He explains that in order to stop yourself from losing, you have to self give. Further he argues that because others were not giving to you, you had to give to yourself – thereby justifying this selfish action as smart.

Extract 2.2.3: 29 July 2014, Inequality individual (I102)

- 115 P5 I think also (.) you know when y- when you give to
- 116 P5 =someone (.) throughout and then when you notice

117 P5 =that no one is giving back↑ it kinda of , I agree
 118 P5 =it is selfish::, im but the same time it you are
 119 P5 =willing to give to someone, you know y- you kinda
 120 P5 =expect a hand back↑ so when no one does that, you
 121 P5 =go 'well (.), I'm not not going to give to anyone
 122 P5 =again then↑

This extract provides insight into the construction of self giving as a smart strategy. He suggests that he is aware that the self giving is selfish, and an immoral conduct, however he justifies the action as an expected act in the game. He argues that if there is not mutual cooperation in the game, a moral behaviour of reciprocation, then it should be expected for participants to become immoral and self give. Further, similarly to extract 2.1.4 he outlines how his response is dependent upon different variables, so for example, if he is given to, he will then give back, if he is not given to, he will give to himself, thereby demonstrating that his process of playing the game is dependent on the situation of which he finds himself.

Extract 2.2.4: 1 august 2014, Individual inequality (II04)

69 F any more comments
 70 P13 yes, I don't know if anybody had this, but I felt
 71 P13 =guilty every time I gave to myself, because I
 72 P13 =thought I was doing something wrong
 73 F did anybody else feel guilty for giving themselves↑
 74 P14 yes, because you were watching

Although self giving was constructed as a smart strategy by members of the different game, these participants admit to feeling guilty about the act indicating to it feeling wrong. Participant 14 however extends this feeling of guilt to be circumstantial, and not about the act of giving, but rather about being caught by the facilitator as it was not instructed as an allowed rule. Participant 14 is not concerned as much about the "wrongful" act as he is about the possibility of getting caught. There is no indication that this feeling stopped the participants from self- giving.

Extract 2.2.5: 29 July 2014, Inequality individual (I102)

- 91 P4 giving tokens to yourself:: yeah, I did not know
 92 P4 that was possible↑, so I did not even try it.
 93 F if you would have known, would you have done it↑
 94 P4 ay (.) I thi(h)nk so, yea (h). I think I would
 95 P4 =have.
 96 F and what did you think of people who were giving to
 97 F =themselves
 98 P4 I think it's a bit selfish, cause I think like, well
 99 P4 =I thought we had to give to each other, so if you
 100 P4 =were to give to yourself, like:: really?

This extract offers a different aspect of self giving. Participant 4 is firstly saying that she did not know that self giving was possible. She then admits that if she had known about it she would have done it herself. Despite this, she then continues to say that she feels that this action was selfish as they were meant to give to one another. It appears from this talk that although she constructs it as selfish, immoral and worthy to be judged, it is still something she would have done in the game. Moreover, her response towards this act is judgemental towards those who self gave as she feels like she has been personally disadvantaged and there was an extended level of unfairness to the game. Her response, has then, less to do with it action being selfish, and more to do with being disadvantaged in the game.

3. Group Equality versus group competition

3.1 Group Equality

Extract 3.1.1: 5 August 2014, Group Equality (E3G02)

- 1 F So what did you guys think of the experiment↑ (.)
 2 F =any comments, any opinions. What do you think it
 3 F =was about
 4 P1 it was about co-operation↑
 5 F okay, what else

6 P2 the other peo::ple did not want to share the tokens,
 7 P2 =>wanted them to keep themselves<
 8 F so quite selfish; keeping tokens to themselves↑
 9 P3 ya, our group was so gene::rous

In this extract, participant 2 is constructing a norm to the behaviour of group equality in the game. This participant appears to have expectations of the other group to share their tokens despite them being in opposing groups. Participant 2 hears what participant 1 says in their comment of the game being about co-operation, and then adds that people did not play the game according to that construction; they wanted to keep the tokens amongst themselves. Moreover, the emphasis on the word “keep” implies that this participant is strongly criticising the other group for not following the constructed norm of sharing. The pausing in the word “people” further implies a construction of detachment from these “other people” that did not act in accordance with her constructed norm of the game.

Moreover, participant 2 has conveyed a meaning of the groups that did not share their tokens to be selfish. This is evident by the facilitators’ response in line 8. Further, participant 3 then reinforces this meaning by adding that their group was acting in contrast to this selfish behaviour and were being generous (line 9).

It is evident that participant 3 is constructing his in-group in a positive light, and judging the out-group for not acting in the constructed norm. The lengthening of the word people in line 6 indicated the separation of oneself from the out-group due to their behaviour against the constructed norm. Moreover, despite the construct of equality, the intergroup group favouritism is still prominent as the group that is being equal considers this not to be a normal expected act, but an act of kindness and generosity. Further by emphasising the word “our”, it indirectly names their other group as selfish (yes, our group was so generous).

Extract 3.1.2: 29 July 2014, Group Equality (E2G02)

1 F so what did you think the game was about
 2 P4 uhm (.) tokens↑ (.)and to show us how selfish we are

3 P10 [I think the game was about people in a (micro
4 P10 =cosmic) society they it is right now. The way
5 P10 =people would have more and people would have more
6 P10 =and people who have less and also those who have
7 P10 =more (.) don't give

8 P4 [ya

9 Some [ha ha

10 P1 [yes stingy

11 P10 in a community if someone would share with you if
12 P10 =they had 16 and a person who has 28 I don't know
13 P10 =would give to a person who has 36 or something.
14 P10 =that was sad, I felt very sad

In this extract the participants again construct moral behaviour to be about equality, and hint at criticism for not behaving according to that construction. This is evident in the extract “to show us how selfish we are” thus indicating that the game was constructed to be about sharing, and equality, but they perhaps played competitively and selfishly. Moreover, participant 10 is pointing out the selfishness in “we”- as a humanity, and by so, demonstrating his morality against this form of behaviour.

Furthermore, there is an expectation that those that have more won't give, thus constructing those with more to be selfish in the game of equality. The pause between “those who have more” and “don't give” emphasises the criticism in the tone of participant 10 against those that have more for not giving to those with less. This participant also extends this issue of not been equality to a society level to enhance the immorality of the actions to those that were not giving.

The word ‘community’ is also used powerfully in this piece of talk. The word community also renders to a niche of members that belong in relationship and loyalty. By this word, the participant emphasises the extent of the betrayal of giving to those with more tokens when there is an expected norm of sharing and behaving as a community; in the best interest of everyone. Finally the personalization of this act at the end of the talk, “that was sad, I felt sad”, indicates that participant 10 constructs this action to be something that causes one to

feel bad. It appears to have personally affected them that people would choose to give to the rich instead of the poor in the game of equality. This participant demonstrating her strong personal reaction to her violated norm in the game and proposes it as an injustice.

Extract 3.1.3: 31 July 2014, Group Equality (E2G03)

10 P2 because it is like (.) they were exchanging tokens
 11 P2 =among themselves like everyone else, even I , if I
 12 P2 =give you my one coin, you give it back >and then<
 13 P2 =those guys don't give it back. It is like in South
 14 P2 =Africa (.) with the corruption and eish, and eh
 15 P2 =Jacob Zuma they get something and they don't give,
 16 P2 =exchanging the money between themselves, exactly.

This extract takes this constructed injustice act one step further, as participant 2 connects this act of injustice to a political issue. The pause after the words 'South Africa' is effective as participant 2 is building suspense and drawing emphasis on the current state of South Africa. He uses current political issues, such as corruption, to emphasise the injustice of not giving tokens equality. Furthermore, the participant is placing guilt on those that didn't give to those with less by linking them to a controversial act of corruption. Moreover, he is advocating justice and equality to be an act of reciprocation as well as voicing his expectation of this form of conduct in the game.

Extract 3.1.4: 31 July 2014, Group Equality (E2G03)

54 P5 I think (.) yes truth be told, <we can't be all
 55 P5 =equal> but then (.) I have something at least I
 56 P5 =know that I must If a ↑little bit give to the to
 57 P5 =the underdogs the people who don't have literally
 58 P5 =anything. I must give to them, not the two guys,
 59 Some [ha ha
 60 P5 not Jacob Zuma and Julius, no

Although equality was an expected constructed norm, this extract indicates that equality can be limited. Participant 5 is arguing that the truth is that people can't be equal. By stating that

it's the truth, he is insinuating that it is not wrong to be unequal, but the wrong aspect is the act of not giving in a situation of exaggerated inequality, (line 58). The phrasing of his argument indicates that giving to the 'underdogs' is an action of duty – the right thing to do. The term “underdogs”, also renders to participant 5 understanding that the tokens may represent a form of power, and thereby the more wealth gained the more power will be gained in the game. By being the ‘topdogs’, the ones with more wealth and power, it is their responsibility and morality to help those with less.

Moreover, the two rich guys, the ones that are different from the rest of the group appear to have been ‘out-grouped’ by participant 5 (line 58). This indicates that through the construction of equality, their identity is being formed as generous and co-operative, and if you are the two rich “corrupted” guys, you are ‘out-grouped’. The extent of participant 5 referring to the two rich guys as corrupt is in his use of labels as two controversial South Africa politicians known for corruption and theft.

Extract 3.1.5: 29 July 2014, Equality group (E2G02)

107	P13	[I was trying to keep them in the group (.)but if
108	P13	someone had like a smaller amount of to::kens
109	P13	compared to the people in my group °then I would°
110	Some	no, ay
111	P4	no I'm sorry, I didn't
112	P13	[trying to get them back to 20
113	P14	it did not matter what group you belong to if you
114	P14	=had low just tokens Id just given to you
115	Some	ya, no ha ha
116	P4	there was a <u>person</u> in my purple group who had the
117	P4	=lowest tokens and they <u>just</u> gave them away <u>still</u> >I
118	P4	=was like <u>no</u> < ha ha

This extract takes a slightly different stance compared to the other equality extract as it is a discussion of whether equality is an appropriate form of behaviour in this game. Participant 13 begins by justifying her reasoning for giving to other group members in an attempt to

promote the construct of equality. She does appear confident in her argument as her quieter tone indicates slight hesitation in her justification. Her possible reason for hesitation is quickly identified as the group responds badly to her argument. Participant 4 appeals her construction. By her apologising, participant 4 is recognising that she may be wrong, but she would still not play the game of equality. Participant 13 then attempts again to convince them that her action of giving to another group was justified as that group had less, and it was unfair “to get them back to 20”. She is supported then by participant 14 who states that despite what groups they were in, if someone had lower tokens, he would give to them. This appears to be a strong sense of moral behaviour of both these participants as they appear to have constructed the game to be about equality. This is however, voiced stronger by some of the other participants as they value group loyalty as a stronger moral behaviour. This is evident as participant 4 strongly opposes their justification as he feels that his group should not have less so that they could be equal. He feels that giving to other groups is group betrayal and therefore immoral behaviour, whether they have less or not.

This debate demonstrates a similar attribute to that of Extract 2.1.4 and Extract 2.2.3 in that the participants are balancing and negotiating their different reactions to the game. It appears that although they consider different behaviours to be immoral, there is strong argument for the immoral behaviour to be appropriate in certain condition. Their behaviour is then justified as consequential and dependant on circumstances of the game.

In conclusion, it is evident from the participants talk in data that some groups constructed a norm of equality within the game whereby they would want to distribute the tokens evenly against group members in the game. This act of equality was constructed as an act of duty, and of doing the right thing, by giving to the less fortunate. There was also a continuous underlying feeling of guilt for not being more generous within the game (“to show us how stingy we are”). Further there was a judgement placed on those that did not act accordantly to this norm. Additionally they out-grouped them, associating them as selfish or being corrupt. In comparison however, the last extract indicates that this construction is not agreed upon by everyone, and some may argue that group loyalty is of more importance than equality. Therefore, despite equality being an overall theme in the games, when analysing all the data, it appears that it was not as imperative as the norm of group loyalty and competition.

3.2 Group competition

Extract 3.2.1: 5 August 2014, Inequality Group (I2G04)

44 P11 my strategy was (.)like at first I just at first
 45 P11 =wanted to see what it was we were doing, >so I gave
 46 P11 =to everybody< especially the green one, because
 47 P11 =they had low, but then I realized, you know what↑,
 48 P11 =we are actually lo↑sing here, so I started giving
 49 P11 =to my team mates, but then I knew that most of my
 50 P11 =team mates were giving to the green ones and they
 51 P11 =were gaining more. >So I decided, you know what<
 52 P11 =once in a while I will just go the gre::en side
 53 P11 =< (.)so that maybe they might give me, so that's
 54 P11 =<how I did it

This extract indicated the need for strong equality (“so I gave to everybody, especially the green, because they were low”) but not if the cost was their group losing (but then I realized... we are actually losing here”). Participant 11 says that although equality is of importance to him as his personal strategy (“my strategy”), competition and winning is of higher value as his group was losing (“we are losing here”). The participants rise in tone in the word ‘losing’ indicates that it is phrased as question thus incinerating a surprise in her tone that her group could lose, and worse still by her giving to other groups, could cause her group to lose. This realisation causes her to change her strategy and give only to her group thus ensuring her group wins. This participant therefore changes her strategy and behaviour according to the changed circumstances of the game.

Moreover, this participant, despite the awareness of inequality, constructs her continuous giving to that group to not be an act of kindness or justice, but rather a strategy to get her group more tokens. The participant is justifying what can be seen as an act of betrayal (giving to the opposing team) as an act of loyalty to her group, as its intention was to try collect more tokens for her group.

Further, this is done in a way to remove herself form direct blame (line 49: I knew that most of my team mates were giving to the green). Here the participant is arguing that most of her team mates were doing the same as her and by doing so, releasing the judgement from herself

in doing this unconventional or immoral act. Moreover, she is asserting her behaviour as being loyal to her group in this act, as it was done in the hopes of gaining tokens for her group like her other group members supposedly were.

Extract 3.2.2: 6th August 2014, Inequality flat group (IF3G02)

85 F so at what point did you say 'I'm not giving' to
 86 F =other groups
 87 P4 from the beginning
 88 All [ha ha
 89 P4 when I was reading that indemnity form, I was like
 90 P4 =oka::y this is how this thing is going down, never
 91 P4 =days
 92 F did anything happen during the game that caught your
 93 F attention↑
 94 P4 >the retarded that kept on giving to other groups<
 95 Some ha ha, yoh
 96 P4 it hurt, it really hurt

This extract indicates that participant 4 constructed this to be a game of competition, and winning. From the beginning of the game, he establishes that he is not going to give his tokens to another group. He is establishing the extent of his group loyalty, whilst at the same time judging others for not doing the same. Moreover, he labels anyone that did give to other groups, to be ‘retarded’. That choice of word is used powerfully as it is placing those who gave to other groups to be social outcasts of lower intelligence. Further, there is a tone of judgement, isolation and hatred towards those people in his group.

The reaction from the others in their response is one of laughter with a slight shock indicating that perhaps they are criticising this choice of words by calling them “retards”. Participant 4 then responds by justifying and offering an excuse for his choice of language by advocating

that their act hurt him. Their act was not just an act against the group, but one of betrayal that hurt them and thereby justifying him insulting them and out-grouping these members.

Extract 3.2.3: 5 August 2014, Inequality group (I2G04)

- 38 F and then the green and the pink group, you started
 39 F =on the less number. How did you feel towards the
 40 F =purple group↑
 41 P1 hate
 42 P3 [I didn't like them
 43 Some ha ha
 44 P1 ha(h)te
 45 P4 no I was up for the challenge, I thought you know
 46 P4 =as a group (.) the pinks (.) you know, except for
 47 P4 =that one that was here (.) we should just bring
 48 P4 =together, you know and GET some from them and not
 49 P4 =give away, (.) <but that one something was wrong
 50 P4 =with her or him> who kept on throwing it away >ay I
 51 P4 =don't understand, I thought we were out to win<
 52 P3 what about group work↑ (.) the::se people, they
 53 P3 =don't know group work

This extract follows the same strong feelings of hatred and isolation toward own group members for betraying them by giving tokens to other groups. Participant 1 does not hesitate in his use of language (line 4) in expressing his position against the out-group. The tension in the conversation is broken by the laughter of others in the group, causing him to repeat the word but this time, in a softer manner as he laughs whilst saying hate (line 44).

Participant 4 then contradicts the harshness of this statement by beginning his talk with 'no, I was up for the challenge' indicating that it is a competition, but not as strong as a hateful competition. He continues by expressing that he felt this challenge would have been obtainable if everyone in his group co-operated (line 47-48). Participant 4 constructs a vital

position in this section of data as he chooses not to look at the attack of the out-group and respond with hatred towards them, but rather focus on bringing his in-group together in order to try overcoming them.

Further, by participant 4 describing what the group should have done, before accusing those for not doing it, he constructs a norm and a law under which the group should have followed. In his talk, he outlines the norm, and then accuses the group for doing the wrong thing by giving them away. He is isolating the one participant in particular, and claiming that there must be something wrong with her for not playing according to a constructed norm of competition.

Participant 3, responds strongly again, by isolating those that did not conform to group locality. “These people”, “they don’t know” in his talk, emphasis how participant 3 is isolating the members of the in-group as out-group members.

Extract 3.2.4: 6th August 2014, Inequality Flat group (IF3G02)

- 65 P5 I was tired of these guys, there is one person who
66 P5 =annoyed the hell out of me (.) they kept on giving
67 P5 =other people this, I don't understand why, you know
68 P5 =we almost were catching up to the purple group
- 69 P4 Ya i couldn't understand WHY↑ We were catching up to
70 P4 the other, and then the corner guy, ay the corner
71 P4 guy
- 72 P1 we had ya'll, you beat you'll, there was a point
73 P1 =where we had 94 and I was like yes, its on
- 74 P6 the green was low, I only gave once, once
- 75 P4 [once↑[no, why, not even once
- 76 P5 [do you you think Bill gates (.) if like ah no(.)
77 P5 =lets give google a chance
- 78 P2 yeah they were being personal

Participant 4, 5 and 1 are all voicing their immense frustrations against those that gave tokens away to the other groups. It appears from the conversation that their group was at some point in the game winning, but they lost in the end due to group members giving tokens to other groups. The constructed norm of competition is clear from these three participants reaction toward those who gave to others. Additionally, the isolation of these members within the groups is evident in this extract (line 59-60).

Participant 6 in response however, indicates slight hesitation in this norm of competition in her statement of the green being low, and it was perhaps unfair. She is justifying her act of perceived betrayal to the group by trying to identify that she only gave because they were low in tokens thus trying to present a construction of equality. Moreover, she is giving an excuse for her immoral behaviour of betraying the group and giving to others. She is quickly silenced by participant 4 however as he rejects her excuse and responds in a shocked, questioning of how can you give once (line 64), advocating that there is no reason to give to the other groups.

Participant 5 also responds over participants 1 turn, in order to try and silence her talk of fairness in a constructed game of competition. He accomplishes this, by referring to the game to a business of which, Bill Gates (Microsoft founder) does not give the competitor, Google, fairness. Participant 2 conveys the same meaning of what participant 5 is portraying. He acknowledges that those who were being fair where being “personal” where this game is not constructed as personal but as a business of which fairness and kindness is not in the best interest of a winning focused group.

Extract 3.2.5: 6 August 2014, Inequality Flat group

- 16 P4 got confusing also hhhh. <why> were members of >pink
 17 P4 group giving the other groups<↑tokens WHY↑
 18 Some [exactly
 19 P4 Not once did I ever give anyone(.) why are they
 20 P4 =doing this↑ Ey must stick together. hoaw. >The
 21 P4 =green people were giving me tokens< I don't mind,
 22 P4 =don't mind them giving me but I never never give
 23 P4 =purple or green no °no°.

81 P12 =something and I'm going to give a token to the
 82 P12 =green I would be probably angry at them even though
 83 P12 =I don't even know them, but I'll be like we are in
 84 P12 =the same group °and stuff ya

Lastly, this extract indicates the group member's frustration against their group for not co-operating. Moreover, participant 12, draws emphasises on the fact that although they did not know each other, being in the same group should create a sense of loyalty to one another.

In conclusion the constructed norm of competition may have resulted in the emergence of several behaviours within the game. The first is that of hatred toward other groups. Moreover, participants did not display strong feelings of guilt in their behaviour as they understood their actions as being business orientated and not to be taken personally. Secondly, they displayed immense criticisms against members in the group who gave to other groups and portrayed this action as an act of betrayal and immoral behaviour. Lastly, they isolated those members from their in-group, and not only indicated that there must have been something wrong with them, but out-grouped these members from their in-group

This data revealed, in conclusion, that the participants constructed two different constructs in the game, overall fairness and self-gain. This first, is explained as a moral form of behaviour in the game by the participants. The second construct was recognised as immoral by most participants however, some argued that it was a smart strategy for ensuring self interest.

It has therefore, indicated firstly, that the meaning of the game is created through the relating of the virtual world to the real world contexts. Through analysis the talk and their justifications of their behaviour it became apparent of the meaning they attached to the game and how it influenced their decisions. Secondly, it has identified that the participants constructed different moral behaviours in the games. In the group condition, although the participants advocated for overall equality, it was evident that group loyalty was of high morality. In the individual condition, the participants constructed reciprocation and giving to those with less as moral behaviours. Despite the construction of self-giving as immoral, participants justified it as a smart strategy. Thirdly, the participants indicated in the data that tended to adopt their behaviour and adopt different strategies in occurrence with the shifting context and circumstances that the game presented.

Chapter 5: Discussion

It was evident from the data that the participants tended to create meaning in the game by applying it to world contexts. They would draw upon their current knowledge and understanding to help conceptualise the new world in which they were placed. Moreover, depending on what meaning and construction was created would depict their behaviour in the virtual reality. When they constructed a game of equality, they would give tokens to others in order to maintain a fair distribution, and when a game of competition was constructed they would give tokens only to their own groups in order to gain more to be the winners. Likewise, within the individual condition the construction of the game resulted in different forms of behaviour. When the game was constructed as a competition, more self giving was evident. When the game was constructed as a game of overall fairness between individuals, participants gave of their tokens evenly to one another.

1. The minimal group paradigm and the construction of virtual worlds

The VIAPPL games provided a primitive environment in which no meaning to the games was given other than the instruction to allocate a token over the duration of 40 rounds. Despite this minimal, primitive environment, the participant attached relevant and specific meaning in their construction of the game and its relevance to how they played it. Tajfel (1972) argues that without a cultural norm depicted, participants will draw from the past in order to construct meaning within a new environment. This was evident in these games as they attached political, cultural, and personal illustrations to the game.

Constructivist theorists argue that the way in which the participant constructs the meaning of the games, will influence the way in which the game is played (Raskin, 2002). From the above constructs and the data analysis, it is evident that the participants not only constructed relevant and personal meanings to the game, the data analysis also indicated that the participants also behaved accordingly. They played the game with purpose and intention, expressing their identity and their role in these constructed meanings of the game.

Further, it was evident that a virtual environment then does evoke behaviour as the participants displayed verbal aggression towards one another. This indicates that the constructed meaning by the participants carried significant emotional relevance alluding to

their embodied attachment to the game. However, the expression of identity and purposeful interaction demonstrates that this behaviour is not self-reduced or lacking in social presence, but rather the act of social agents and collaborative oriented activities as the embodied social presence theory predicted. Despite the face to face interaction, the participants displayed a connected and social presence in their interaction with one another.

Moreover, the data revealed similar results to that of the minimal group paradigm as there was a strong inclination by the participants towards group loyalty and group favour. This provides evidence that the behaviours within the games were driven by an expression of social identity. This emphasis on group loyalty demonstrates the accurate prediction of the social embodied presence theory as individuals in virtual environment would not lose social accountability and become uninhibited with no moral responsibility, but rather they would act in accordance with collaborative social oriented behaviours. These behaviours and the weighing of moral behaviours is further demonstrated in the individual condition.

2. Individual condition

The data revealed the participants explaining and justifying of their intended and strategic behaviours in the game, a debate emerged on what they considered moral behaviour. This debate provided evidence of expression of participant's identity as their actions consisted of motives and purpose in the game as opposed to hazard interaction. Some participants felt that self-giving was a smart and acceptable form of behaviour. Whereas others felt that self-giving was selfish and immoral as the game was meant to be played according to reciprocation and overall group fairness.

De Groot and Steg (2009) discuss the three different elements of pro-social behavioural norms in groups. This first refers to personal norms, whereby the individuals carry a sense of moral obligation that influences their behaviour and actions. The second is the awareness of consequences and whether an action would personally affect them. The third is the feeling of responsibility for any negative consequences if they do not behave in a pro- social manner (De Groot & Steg, 2009).

The first, in terms of moral obligation is evident in the act of reciprocation and overall fairness in the game. The data revealed that a moral inclination and obligation by the participants, in giving to those with fewer tokens, towards this form of behaviour is evident.

This was constructed as moral action whereby the participants advocated that the need and expectation to give to those with less in the game.

Likewise, in terms of reciprocation, the giving of a token to those who gave back to them was constructed as a moral obligation. Further, Takahashi (2000) identifies that reciprocation behaviour in social contexts is a universal norm that participants will act in accordance with. He also argues however, that reciprocation is a strategy of economic self-interest. Given that the participants earn money from the amount of tokens they received in the game, an economic self-interest may have influenced their strategy of building reciprocal relationships in the game (Takahashi, 2000). Both elements are indicated by the data, as participants argue the morality of reciprocation, as well as adhering to it being a strategy for self-gain and personal interest. It therefore appears to be a moral and acceptable form of behaviour that is also self beneficial, thus indicating its popularity as a chosen strategy in this game.

The anonymity of computer mediated programs such as in this game, however, provides a protection from the need to perform in pro-social behaviours. The second and third elements related to negative consequences of not adhering to the moral norm of social behaviours (De Groot & Steg, 2009). Through anonymity and the freedom from judgement and direct negative consequences it allows for the emergence of new forms of behaviours (Reicher et al., 1995). The data indicated this strategy of self-giving. Instead of acting according to a moral norm of reciprocation, in the anticipation of personal benefit, they acted directly in terms of self-interest.

Despite the participants being aware that their behaviour was considered to be immoral, they construed it was a smart strategy, and thereby justified it. They argue that it was more beneficial to the group than reciprocation. Thereby, they advocated that it was of value and worth the immorality. Furthermore, although the participants criticised this strategy as being a form of cheating, they admitted that if they had known that it was possible they would have done it despite their expressed morality in the game. This provides evidence of the anonymity providing protection and freedom of judgement, of participants going against a universal norm, and presenting an emerging new form of behaviour. This behaviour is illustrated by the SIDE model, as the strategic aspect argues that anonymity allows for participants to portray different norms without fear of judgement from the group.

3. Group Condition

The data in the group condition also revealed a debate between participants on what was to be considered moral behaviour. The debate centred on whether it was acceptable to give tokens to other groups. Some participants appealed for group equality, and wanted to act morally by giving to the less fortunate and to reciprocate kindness by giving those who gave to them.

Although this behaviour was evident in the games, the talk demonstrates that they attempted to justify this behaviour, as good moral action. This indicates that they understood that it was perceived as immoral action by the group. Moreover, this construction was not prominent, as most participants argued that the game was about being loyal towards the group as the highest form of moral action. The prominent talk in the data centred on the participants towards group loyalty and group competition.

Group loyalty, firstly, was evident in the data as there was a strong outcry towards those that gave to other groups. The data revealed that not only were these participants questioned by other group members, but they were also targeted and insulted for betraying their in-group. Moreover, there was a continuous isolating and removing talk such as ‘‘them’’ and ‘‘those guys’’ towards these members as if they were expelled from the in-group, thus drawing emphasis the extent of expectation for group loyalty within the game.

Additionally, participants considered the betrayal of the group as a personal hurt towards them. Social identity theory provides insight into why this behaviour would occur. It argues, that when people are categorised into groups a shift from their personal identity to a social identity occurs – they become one with the group (Hénaff, et al., 2015). Whatever it does to the group, is also then done to the individual, allowing for a betrayal to the groups to be taken personally. The action of giving to other groups was seen as a personal betrayal and form of immoral behaviour in the game.

Secondly, group competition was prominent in the talk of the games. Participants criticised those who gave to other groups as it would impact their ability to gain more tokens against the other groups. Some participants argued that they only gave to other groups to try and bring them up as the gap between the groups was too great. This was rejected by other participants as there was need for competition and maximum group difference. Social identity theory again indicates why this is a prominent response.

Tajfel (1982) argues that as the individual has a shared identity with the group, the individual's self-esteem is linked to maintaining a positive social identity. By ensuring the group wins it strengthens the group's status, thus improving the positive social identity and thereby improving the individual self-esteem. The group then does not only favour its own group by conforming to the norm of giving to each other only, but also displays a polarised and attitudes towards those that did not comply (Tajfel, 1982). This was evident in the data as participants displayed feelings of hate towards members that gave to other groups and did not comply with loyalty toward their own groups members.

The SIDE model provides further explanation for these behaviours as it argues that the categorisation causes the perception of the in-group similarities to be accentuated whilst the out-group similarities are diminished (Reicher, et al., 1995). Due to the anonymity of the virtual world, and the only similarity between the groups is their group colour, the categorization is more effective as their similarities are accentuated thereby stringing their group identity and inward favouring moral behaviours. Anonymity causes higher sensitivity to group norms evoking immoral social behaviours (Reicher et al., 1995).

Further, Tajfel (1982) argues that when a group is amongst another group, the intergroup comparison between the groups will lead to greater in-group favouritism. This salience results the groups categorization characteristics and behaviours to become salient thereby evoking an emergence of immoral forms of behaviour.

Behaviour as an expression of identity then is evoked to be immoral due to two main facets in a virtual reality. First, the shift of identity from the individual to the group, results in a greater group loyalty (Tajfel, 1982). Second, the accentuation of categorisation from anonymity as well as the presence of other groups, the need for this group to maintain a positive social identity results in the characteristics of groups to become salient. This evokes a competitive and moral allegiance towards their in-group thereby allowing for a polarised behaviour to emerge. (Tajfel, 1982).

These facets evoke the participants to be outweighed in their moral reasoning, and act in accordance with their group as opposed to their personal moral preference of giving to the less fortunate. They act in accordance to their shifted and more valued group morality of loyalty and competition despite their own personal convicted moral actions. This, in conclusion, supports the SIDE model and contradicts the Deindividuation theory as behaviour

is not being caused by identity loss and individual rationality, but rather by the expression of social identities and their new morality as a group.

4. Individuals versus the group condition

There are a number of ways in which the two conditions were different in their findings. In terms of their similarity however, within both of the conditions the data revealed that the behaviour of the participants was conditional to that of what the environment presented. There was a consistent weighing of different options and different moral responsibilities. The decisions made were not as simple as right or wrong, but rather demonstrated a complexity of judgement by the participants of what they considered right in different contexts. This is revealed in the data as the participants expressed that they started playing the game a certain way, but then due to the circumstances, their strategy and behaviour had to evolve in an attempt to either benefit themselves or the group.

Hodges and Geyer (2006) demonstrate how Asch's (1951) experiment can explain this type of behaviour with reference to moral dilemmas. Asch's experiment intended to evaluate the moral dilemma of independence against submission (Hodges and Geyer, 2006). However, this moral dilemma is not as simple as determining a right or wrong action, but rather a conflict of multiple values that are in tension with each other. Although the participants valued independence, they also valued group cohesion (Hodges and Geyer, 2006). In different circumstances of the experiment, different values are evaluated impacting different responses.

Similarly, in this game, different values such as reciprocation, group equality, self gain, and group cohesion were evaluated at different points of the game evoking the shifting and emerging behaviours in the game. Although these actions were questioned by members in the game in search for a wrong or right method of playing the game, participants recognised the tensions between the different multiple values of reciprocation, competition, equality, and that their moral responsibility was used to determine their appropriate shifting behaviours (Hodges and Geyer, 2006).

Although the participant's behaviour in both conditions in this virtual environment are immoral, they are not like the deindividuation theory claims, lacking in moral responsibility. This behaviour cannot be judged according to an immoral versus moral debate, but rather a

consistent and emerging shift between tensions of multiple social values and their value within different conditions (Hodges and Geyer, 2006).

In terms of the group's differences, although both groups displayed levels of criticism, the group conditions displayed a stronger criticism and annoyance with members for the way in which the tokens were distributed. The criticism indicates that participants were displaying a shared identity as their criticism was directed towards monitoring and regulation of behaviour. The stronger criticism within the group conditions reveals that stronger social identities were formed in this condition. As discussed previously, this displays the social identity theory, as when groups are categorised and in the presence of other groups it results in a greater intra-group comparison and a strengthened social identity (Tajfel, 1982).

This is further supported by the difference in strategy in the games, as in the group condition, the participants explained their intentions in the game, whereby in comparison, the individual conditions they were more inclined to be giving tokens randomly. This demonstrates that in the group condition they were acting in favour of their group and were actively engaged in the game. Along with social identity, this provides evidence for their behaviour being an expression of their identity, as when their social identity is enhanced, so is their behaviour.

Both conditions also revealed an emergence of different forms of behaviours. The group condition indicated that the higher moral behaviour is to only give to your group despite the extreme poverty of the other groups. The individual condition indicated that giving to your self was a smart strategy for winning despite it betraying and leaving the other group members with less. Both indicate that anonymity is fundamentally influencing behaviour in two ways, social identity and strategy.

In summary then, the SIDE model offers explanations for the different behaviours in both conditions. It outlines that in a computer mediated environment, anonymity will enhance the social categorization and identity between group members increasing their behaviour according to group norms. Additionally, it will allow individuals the freedom from judgement from peers to strategically influence and challenge the group norms and cause a shift of a new form of behaviour.

This explanation differs to that of the Deindividuation theory. This theory argues that the anonymity leads to the individuals within a crowd to lose their identity and reasonability. According to Reicher et al., (1995), this loss of identity has two main consequences; the

inability to make conscious discriminations and less self-monitoring behaviour. The data indicates that this is not the case in a virtual world as participants acted with strategy and intention. Moreover, they revealed frustration towards others for not behaving in a similar way to them, thereby indicating that not only are they aware of their own behaviour, but are additionally aware of others' behaviour. It is then not self-reduced nor uninhibited, but rather a socially influenced interaction of social engagement (Spears, et al., 2002).

In conclusion, constructivist theorists argue that the construction of meaning will influence behaviour. These games were constructed according to relevant and personal experiences which resulted in a personal expression of their identity. This indicates that a virtual interaction is a social environment, whereby participants are socially engaged. Moreover, in both conditions there were debates on what the participants considered moral behaviour. The group condition indicated that remaining loyal to the group was of higher morality than being fair or giving to those with less. This indicates that a shift from personal to social identity had occurred. It is evident then that anonymity does not result in the loss of identity but results in a higher sensitivity to group norms, evoking social behaviours through the expression of their new social identity, outlining the cognitive aspect of the SIDE model.

Additionally, the strategic aspect of the SIDE model is also evident as within the individual condition. Although individuals still played in terms of moral obligation, overall fairness and reciprocation, there was an emerging behaviour of immoral self-giving. Due to the anonymity of the virtual environment, participants were free from judgement and were able to construct an immoral behaviour as a smart strategy for winning the game and further present this to the group as acceptable norm within the game.

Lastly, both conditions also indicated high levels of criticism towards the ways in which others played the game demonstrating that the participants were self aware of their actions, as well as aware of others actions, underpinning the Deindividuation Theory that virtual environment behaviour is uninhibited or self reduced. Rather it is socially influenced interaction of social engagement (Spears et al., 2002) as outlined by the SIDE model.

5. Limitations and recommendations

Although the results and discussed outline from the previous two chapters are relevant in terms of providing insight into the moral reasoning of behaviour in a virtual study, there were some limitations to this research that can be improved upon. This study firstly, was conducted

at The University of KwaZulu-Natal, from which the sample was drawn. This limits the study generalisability as the sample consisted mainly of isiZulu men, and the data thereby reflects a small area of individuals and is not transferable to all population groups. In order to provide a more transferable account of virtual interaction, other provinces in South Africa would need to part take in similar results and correlate the findings against the findings of this study.

Secondly, there were more group condition games analysed in this study than the individual condition games. This provided less insight into the individual games and the experiences of the virtual environment as non-categorised members. This may have impacted the results as the data may not have been extensive to fully capture the experiences.

Thirdly, the questions to the focus group were limiting as they did not ask specific questions relating to anonymity or moral reasoning. Although the semi-structured interviewing style was beneficial, as the participants lead the discussion revealing their natural responses, it may have been of value to add a few questions nearer the end of the focus group. Examples of these questions include:

- To what extent did you utilize the aspect of being anonymous?
- Is there any way in which you played the game that made you feel guilty?
- Would you play the game any differently if each player was identified?

Conclusion:

The minimal group paradigm provides a platform for the participants to construct their own meaning of a virtual reality environment. This allowed for this study to uncover the construction and experiences that affected the behaviour of the participants. Despite interaction of virtual worlds being through media configurations, and the immediate embodiment is not present, it is evident that the participants are socially engaged in the virtual world as they played the game with motive, intention and strategy. This then counteracts the argument that there is a lack of social presence in virtual worlds resulting in an aggressive and immoral behaviour.

Moreover, the data revealed that participants used their behaviour to express their identity and position themselves in the construct they attached meaning to. Further they stipulated recognition of moral dilemmas and tensions resulting in them shifting their behaviour according to the different emerging values. The behaviour in these games therefore, is not due to a loss of identity or moral reasonability. Participants revealed in the game that they were self-aware of their actions and their moral dilemmas, and acted accordingly. In summary, due to the attached meaning of the game, it allowed for a shift of anti-normative behaviour to become appropriate, normative and moral behaviour.

Both aspects of the SIDE model, cognitive and strategic, demonstrate that the anonymity of virtual worlds provides two different explanations for anti-normative and immoral behaviour. The anonymity provided by the virtual worlds, firstly, evoked the individuals into a greater emergence of social identity leading a new form of moral behaviour to develop, demonstrating the cognitive aspect of the SIDE model (Spears et al., 2002).

Secondly, anonymity provides protection from judgement allowing for strategic behaviour in the forming of new norms despite the norms of the in-group demonstrating the strategic aspect of the SIDE model (Spears & Postmes, 2015). Thus demonstrating that anonymity provided by virtual worlds enhances social identity and identity performance in interaction, and thereby resulting in anti-normative behaviors to emerge in computer mediums.

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Appendix A

Information Sheet

Dear Participant,

This is a research project on intergroup behaviour.

Brief outline of the study: This research study aims to explore behaviour in a social setting. The study is electronically based game, played by up to 18 players, by giving and receiving of tokens.

What you will be required to do: The study will take place in the Psych Lab. You will be required to play a game and answer a questionnaire. This will take about 20-30 minutes of your time.

Voluntary participation: Your participation is voluntary and you are not being forced to take part in this study. The choice of whether or not to participate is yours alone and there will be no consequences if you choose to not take part. You may withdraw from the research at any time by telling me that you do not want to continue. There will be no penalties for doing so.

Anonymity: Although we will ask you to register as a research participant, your responses will not be linked with your name or any other information by which you can be identified. In other words, you will remain entirely anonymous and your participation will remain confidential. There are no limits to confidentiality.

Research incentive: You will be given an amount of money after you complete the study that depends on the number of tokens you get in the virtual experiment. Each token in the game is worth R1 in reality. There will be **an average incentive of R20** per player but please note that **you may finish the experiment with less than this amount** or more or perhaps with no money at all. It all depends on what happens in the game. If you end up with get one token you will receive R1; if you end up with 20 tokens you will get R20.

I understand/do not understand that I may leave the study with little or no cash incentive.

Furthermore, you will be placed in a group at the start of the game. Some groups will start with more tokens than other groups. Based on the group you are placed in you may start with more than 20 tokens or less than 20 tokens. This will influence your tokens at the end of the game and thus your incentive money. Whether your group has more or less tokens at the beginning of the study is not personal and should not be taken as such.

I understand/do not understand that I may be placed in a group with fewer tokens in the beginning of the game and that this could reduce my final possible cash incentive.

If you participate in this experiment you are accepting that you agree with these conditions. If you do not agree with these conditions then please do not participate in the experiment.

Who to contact if you have been harmed or have any concerns: Although this research involves very little risk, if you have any questions or complaints about aspects of the research or feel that you have been harmed in any way by participating in this study, please contact:

➤ Project Leaders: School of Applied Human Sciences, University of KwaZulu-Natal:

Professor Kevin Durrheim (Durrheim@ukzn.ac.za) and Dr. Mike Quayle (QuayleM@ukzn.ac.za)

➤ Human Social Science Research Ethics Committee:

Ms. Phume Ximba (ximbap@ukzn.ac.za/ 031 260 3587)

Appendix B

Consent form

I hereby agree to participate in research on social interaction. I am aware of what is required of me, and I understand that:

- I am participating freely and without coercion.
- This is a research project whose purpose is not necessarily to benefit me personally.
- I will remain anonymous and my participation in the study will remain confidential.
- I have a right to withdraw from the study at any time, without penalty.
- I agree to the results of my participation being used for research and teaching purposes and for presentation in reports and at conferences. My name will not appear in any of these documents.
- I agree/disagree to the discussion at the end of the game being recorded for research purposes.

Signature of participant:

Date:_____


Appendix C

Jefferson light system of transcription notation

(.)	A full stop inside brackets denotes a micro pause, a notable pause but of no significant length.
[Square brackets denote a point where overlapping speech occurs.
> <	Arrows surrounding talk like these show that the pace of the speech has quickened
< >	Arrows in this direction show that the pace of the speech has slowed down
()	Where there is space between brackets denotes that the words spoken here were too unclear to transcribe
<u>word</u>	Under When a word or part of a word is underlines it denotes a raise in volume or emphasis
↑	When an upward arrow appears it means there is a rise in intonation
↓	When a downward arrow appears it means there is a drop in intonation
→	An arrow like this denotes a particular sentence of interest to the analyst
WORD	CAPITALS where capital letters appear it denotes that something was said loudly or even shouted
Wo(h)rd	Hum(h)our When a bracketed 'h' appears it means that there was laughter within the talk
=	The equal sign represents latched speech, a continuation of talk
Wo::rd	:: Colons appear to represent elongated speech, a stretched sound
Ha Ha	Soft laughter

Appendix D

Ethical approval

 **UNIVERSITY OF
KWAZULU-NATAL**
INYUVESI
YAKWAZULU-NATALI

09 July 2015

Ms Simone Taylor 210550460
School of Applied Human Sciences
Pietermaritzburg Campus

Dear Ms Taylor

Protocol reference number: HSS/0021/014
Project title: The construction of meaning and the regulation of behaviour within a virtual environment.

Full Approval – Class Application

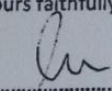
I wish to inform you that your application has been approved, and linked to the study Ref: HSS/0021/014.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number. Please note: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

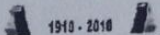
Yours faithfully


.....
Dr Shenuka Singh (Chair)

/px

cc Supervisor : Professor KL Durheim & Kim Titlestad
cc Academic Leader Research: Professor D McCracken
cc Administrator : Ms N Ndlovu

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