

YOUTH PERSPECTIVES ON CYBERBULLYING AND SOCIAL MEDIA PLATFORMS:
TEEN AGENCY, INTERACTIVITY, AND SOCIAL COGNITION

by

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Abstract

This research examines how social media platforms have reconfigured traditional notions of social interaction and specifically how a sample of youth view these platforms in light of problems with cyberbullying. The research design included two primary questions: 1) How do social media platforms reconfigure social interaction and means by which youth perceive and understand these platforms? 2) What role does social cognition play in youth perspectives of online identities and interactions in relation to cyberbullying? The participants included nine Grades 10-12 students (4 males and 5 females), aged between 16-21 years. The research site was an independent high school located in the Lower Mainland of British Columbia, Canada. Actor-network theory and optimal distinctive theory (Brewer, 1991; Latour, 2005) formed the theoretical perspective for analyzing, discussing and the presentation of the research study findings. Data were collected through ethnographic techniques, including observations, artefacts (documents, etc.), and interviews (focus group).

The following thematic findings were derived from data analysis: Interacting with and through content; Connectedness and reduced telepresence; Platform-culture; Growing up online; Assemblage: Self as assimilated; Assemblage: Identity as fluid and layered; External observer: Recalling social schema; Immersed-bystanders: Imposing social schema; and Aggressive coping to the self as target. Given a separate parallel state of identity, users are challenged to maintain acceptable or appropriate behaviour. The findings of this study provide helpful insights into why online antisocial behaviour and cyberbullying become pervasive and toxic. The implications and significance of the research findings have relevance for educators on how best to engage and understand teenagers in these spaces, with new and effective measures to examine instances of conflict and antisocial behaviour online. For social media companies and startups, it provides an

insight into the nuanced mode and context of interaction prevalent within these platforms and the resulting impact on how individuals, the collective, and the platform itself all exert influence on each other.

Lay Summary

The purpose of this research study was to understand teens perspectives on social media. Specifically it examine how social media platforms has altered the way they engage with each other, how this altered mode of interaction impacts the manner they enact themselves, perceive these spaces and the role social cognition plays in their perspectives when examining instances of online antisocial behaviour and cyberbullying. The participants involved in the study were high school students who self-identified as active social media users. The findings from this study indicate that the ubiquitous mode of interaction within these spaces deviates from traditional norms, with resulting consequence that impact users' understanding of such spaces, perception of others and the way they enact their online selves. The findings also indicate that interactions, perception, and mode of responses to conflict situations are based on previous experiences and currently held notions of what constitutes appropriate online behaviour.

Preface

This dissertation is an original, independent, and unpublished research work by Kesiena Chris-Iwuru, under the guidance and supervision of the Supervisor, Dr. Stephen Petrina, and Committee member, Dr. Franc Feng. The ethics approval for this research was provided by the University of British Columbia Behavioural Research Ethics Board (Certificate #H06-80670). The research was partially funded by the Social Sciences and Humanities Research Council Insight Grant #435-2014-0510 (How We Learn Media & Technology Across the Lifespan), under the direction of Dr. Petrina.

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List of Abbreviations

Actor-Network Theory (ANT)

Massively Multiplayer Online Role Playing Games (MMORPG)

Optimal Distinctive Theory (ODT)

Qualitative Data Analysis (QDA)

Social Networking Site (SNS)

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Dedication

To my dear and wonderful parents, Sir and Lady Iwuru, words are never enough. I love you both
so much.

Chapter 1: Introduction

The internet has significantly transformed and improved all aspects of human endeavour; it currently steers innovation and development in all sectors, from commerce, healthcare, education, agriculture, industry, recreation, and government (Petrina, Volk, & Kim, 2004). The internet's most notable contribution is availing easy access to information and facilitating communication and tasks across borders, which makes it easier to share and circulate information. It has become an integral part of human communication and of a personal nature by becoming essential to social interaction and communication (Brignall & Van Valey, 2005). The internet has driven the ascent in popularity and use of social networking sites (SNS's) like Facebook and YouTube, apps like Snapchat, WhatsApp, and WeChat, and virtual platforms for gaming such as Minecraft, Steam, and World of Warcraft. This trend coupled with the proliferation of electronic devices capable of accessing the internet (Neumann & Neumann, 2014) has contributed to online SNS's and virtual platforms becoming interwoven with contemporary social interaction. The age cohorts most drawn to these SNS's and virtual platforms are teenagers (O'Keeffe & Clarke-Pearson, 2011), who are active users and their internet access has grown rapidly due to their proclivity for technology use. The age of first internet access among children gets younger each decade (DeBell, 2006; Ey & Cupit, 2011).

Figures highlighted by Strom and Strom (2012) indicated that 75 percent of sampled teenagers reported using one form of SNS for communicating and 48 percent of them use a SNS on a daily basis. This figure increased to between 80-97 percent for students in the sixth grade and beyond (Abiala & Hernwall, 2013; Strom & Strom, 2012). One of the reasons for this trend is the increased availability and use of the internet in household and school settings with young children and teenagers (DeBell, 2006; Neumann & Neumann, 2014). In Canada and the United

Kingdom for example, 87% of households are connected to the internet; the number is over 90% in countries like Norway, Sweden, Denmark, and the Netherlands, with the United States at 80% (Canadian Internet Registration Authority, 2014). Internet access within schools is high; nearly 100% of public schools in the US and Canada have some level of internet access. In the UK 93% of secondary schools and 62% of primary schools have internet access with Australia and Hong Kong both having 76% and 70% internet access respectively in both home or early childhood settings (Ey & Cupit, 2011; Loo, 2012). Young children and teenagers access the internet in learning and home environments and as such, network connectivity becomes more than a conduit into the new way of existence. It assumes the norm as a means of social interaction mediated by technology that cuts across boundaries and distance. Research studies have identified teenagers as the most active users of social media and the keenest consumer of its content. Understanding teens in these environments presents a significant challenge and opportunity for not only social media companies but educators, parents, and researchers in view of underlining how best to engage them in these spaces and create a means of addressing issues that currently affect them while in these spaces, such as cyberbullying and online antisocial behaviour.

1.1 Background

SNS's and social media have altered significantly the modality of how friendships are established and maintained among teenagers. Engaging in social media and similar platforms has shown benefits by enabling teenagers share and express their feelings, thoughts, and ideas with others of similar interest, develop identity in social context, enhance social interaction, communication and availing collaborative learning opportunities (Abiala & Hernwall, 2013; O'Keeffe & Clarke-Pearson, 2011; Strom & Strom, 2012). While it is incontestable that children and teenagers are active users of social media networks and virtual environments for social

interaction, play, and learning, they may not fully comprehend the complexity, appropriateness, and consequence of some of the actions and content of their interaction within these platforms, or how the continuous use of these social platforms shape and impact them in the long term.

As teenagers become proficient and independent with the internet and social media platforms, they explore these spaces often unsupervised (Ey & Cupit, 2011; Loo, 2012; Strom & Strom, 2012). This is as a result of most parents' overestimating their children's ability, they view them as digital natives and tech savvy people who know more about technology than themselves (Petrina, Feng, & Kim, 2008; Plowman & McPake, 2013). This assumption and entailing neglect may expose teenagers to risks and dangers such as cyber-bullying, inappropriate content and communication, commercialism, sexual predators, and threats to privacy (Ey & Cupit, 2011; Valcke, De Wever, Van Keer, & Schellens, 2011). This raises concerns about what teenagers are exposed to online and how it affects their social development. For example, children who experience cyberbullying usually express negative behaviour such as fear, severe isolation, suicide, psychological trauma, and negative self-image (Petrina et al., 2004; Valcke et al., 2011). To a large extent, while most online platforms used by teenagers are monitored to ensure that inappropriate content is not hosted on such platforms, a common threat faced by children and teenagers using social media platforms is cyberbullying. It is one of the most reported peer-to-peer online risks for children and teenagers using social media sites and apps (Bentley et al. 2017; O'Keeffe & Clarke-Pearson, 2011). Cyberbullying is defined as: "An aggressive, intentional act carried out by a group or individual, using electronic forms of contact, repeatedly and over time against a victim who cannot easily defend him or herself" (Smith et al., 2004, p. 376). This typically involves *intentional* and *repeated* use of online media to harm, frighten, threaten or communicate false, embarrassing, or hostile information about another

person (O’Keeffe & Clarke-Pearson, 2011; Strom & Strom, 2012). Gallo (2013) asserts that the consequence of this kind of bullying is that it “goes beyond face-to-face interaction and follows students into their bedrooms through their computer and phones” (p. 2) (Hymel & Swearer, 2015; Hymel, Rocke-Henderson, & Bonanno, 2005). In the case of cyberbullying teenagers find it difficult to escape such harm; since they are part of a generation that lives a large portion of their lives in the digital world and the digital world has become part of how they define and express themselves. For most teenagers who are victims of cyberbullying, giving up their digital connection is a hard choice, and for some not an option (Gallo, 2013), as it also means giving up part of what defines contemporary interaction within their age group.

Researchers have since sought to explore and understand teenagers and their use of social media to identify how these spaces impact them, and in turn how teenagers understand these spaces to uncover ways to better engage them in these platforms in areas like education (e.g., collaborative learning), psychological and cognitive development, adolescent development, sexual health development, and concerns such as cyberbullying and antisocial behaviour (Connell, Schell-Busey, Pearce, & Negro, 2013; Gomez-Garibello, Shariff, McConnell, & Talwar, 2012; Guse et al., 2012; Lonigro et al., 2014; Monks et al., 2015; Neumann & Neumann, 2014; O’Keeffe & Clarke-Pearson, 2011; Sticca, Ruggieri, Alsaker, & Perren, 2013; Zhou et al., 2013). A large number of these studies largely focus on online social presence and cyberbullying, and fall into two categories: *user experience* and *software intervention*. Studies of *user experience* typically explore cyberbullying within the context of risk factor, psychological effects, classification, events, moral perception, gender, disengagement, emotion, power, and reports of aggressive behaviour (Connell et al., 2013; Gomez-Garibello et al., 2012; Lonigro et al., 2014; Sticca et al., 2013; Zhou et al., 2013). *Software intervention* studies typically focus on

a specific platform, for example Facebook, YouTube, or Twitter and explore modes of intervention (e.g., dissenting effect and cyberbullying sensitisation) as a means of encouraging users to speak up and address occurrences of cyberbullying within the specific platform (Anderson, Bresnahan, & Musatics, 2014; Messitt, 2014). These studies entail employing software tools (machine learning and natural language processing) to detect and measure offensive language patterns and frequency of cyberbullying within SNS's, apps, and virtual environments (Dinakar, Jones, Havasi, Lieberman, & Picard, 2012; Lieberman, Dinakar, & Jones, 2011; Reynolds, Kontostathis, & Edwards, 2011). Studies examining cyberbullying from a *user experience* often explore a single perspective, for example, gender, power or emotion, and typically do not employ a combined perspective within their investigation. The drawback of results from studies focusing on a specific platform is that their findings may not necessarily be applicable to other platforms. The issue with most studies employing a software intervention approach to examining cyberbullying is that “computers still can’t fully understand English, but progress in natural-language processing means that sometimes we can partially understand some aspects of a text” (Lieberman et al., 2011, p. 93). The shortcoming of the software intervention approach is that results may sometimes be a false positive, indicating a language as offensive when it is not. For example in Reynolds et al. (2011), machine language was only able to detect and record a percentage of curse and insult words in a small data sample. However Lieberman et al. (2011) pointed out that application of software in addressing cyberbullying need to go beyond simple word count and matching. This is as a result of cyberbullying being personal and contextual in nature; making it difficult to detect abusive words in context, since the context in which the word/language is used has to also be considered (Lieberman et al., 2011). A key

observation in most studies that explore teenagers and social media is that they offer no unified entities or concepts for examination.

1.2 Research Purpose and Problem Statement

Social media platforms are far more complex than we can ever fully understand. The very nature of a platform's existence is held up by conflicting forces, for example the self and collective, and as a space it serves a panoply of often competing offline agendas (Luke, 2002). For example, like most users, teenagers see their social media platform as a space for interaction with multimedia content, making new friends, and maintaining existing contacts. Platform developers and owners see such spaces as a means to leverage profit by increasing daily active users. Data analytics and aggregation firms see these platforms as fertile grounds for mining complex (and sometimes personal) data from users, manipulating them with advanced algorithms to create a consumer profile for advertising. Industries and businesses see these spaces as an opportunity to engage with their customers and advertise to potential customers. These agendas shape social media spaces, the result is one where external forces and the space itself impacts its users and makes them act in ways that they may not fully be aware.

This research adopts a ground up approach. It seeks to unpack the assemblage that currently exists within teen social media use: how do these spaces alter social interaction and the online self in relation to others? How do youth understand these online social spaces? The research highlights a means of examining teens and their use of social media from a micro level by first examining how the online self is enacted within social spaces and virtual environments. The premise of this approach is as follows: the construction of the online *self* is an intentional act. The resulting entity of this action serves as the locus for interaction with other users within social networking sites and related apps (Abiala & Hernwall, 2013). Since social media sites and

apps are interactive spaces, it is also important that the concept of the self understood in its deployment in relation to others. How can the findings from this provide insight in addressing issues of antisocial behaviour online? This research adds to the existing body of knowledge on teenagers and their social media use, and proposes three key concepts: agency, interactivity, and social cognition as a benchmark to examining teenagers within social media platforms.

1.3 Research Questions

The research questions are:

1. How do social media platforms reconfigure social interaction and means by which youth perceive and understand these platforms?
 - a. To what extent does the technology within social media platforms act as a *metaterritorial* domain in shaping the production of the digitally mediated self and steering of agency?
2. What role does social cognition play in youth perspectives of online identities and interactions in relation to cyberbullying?

1.4 Limitations

Limitations of this qualitative research are defined more by confirmability and credibility than validity (Miles & Huberman, 1994, pp. 277-279). The following limitations shaped the research:

1. Participants were drawn from a private secondary school in an urban district of a large city in the Canadian west. Rural students or youth from variously less affluent countries could provide different perspectives.

2. Nine participants were recruited but this allowed for depth rather than breadth in perspectives.

The location of the participants may have had a resulting impact on the perspectives they express. For example, affordances typical of large cities like enhanced telecommunications infrastructure (e.g., 4G LTE) often avails easy accessibility to social media platforms through smartphones. This may also alter the relationship the participants have with social media. While the number of participants may have impacted the variety of perspectives expressed, it offered an opportunity to capture detailed and rich responses to the questions and for the participants to effectively engage with one another. This would have been challenging in a much larger focus group.

1.5 Positionality

I identify as an avid social media user and advanced media and technology specialist. Throughout the time of this research, I travelled through various regions of Canada, the United Kingdom (UK), and Nigeria, which are culturally and geographically different. I experienced and observed differentiated uses of media and technology throughout my travels and through this research. The regions all have heavy consumption of content through social media but a noted difference in Canada and UK is the pronounced and rapid use of social media for expression of self and identity. Cyberbullying is similar to traditional bullying but the immediacy of SNS's and apps through smartphones has made the effects of bullying more potent and noticeable since the most vulnerable group of users (teenagers) are also the most active. My use of social media began as an adult: when I started, very few platforms existed and they were only accessible through a computer. The term *cyberbullying* was an alien concept and like most of my cohort, I spent more time exploring the features within the platforms, seeing it as another means (like the

phone) to communicate with friends. My later background in engineering reinforced a notion that technology is amoral, with no capability of exerting influence. The summation was that what society interpreted about these spaces, especially as it relates to social media, was better off focused on users rather than the media and technologies themselves. My academic journey provided the opportunity to acknowledge that the intense use and proliferation of media and technology alter the relationship we have and subsequently the relationships we maintain and sustain. The approach taken for this research recognizes that the experiences and views of the participants are unique given the times in which they grew up. The role I played as the researcher was to attend to the participants' expressions of their experiences and perspectives.

1.6 Organisation of Thesis

The organisation of the Thesis is divided into five chapters. Chapter 1 introduced the topic of inquiry, research study background, the research problem statement, and research questions. Chapter 2 provides a literature review and detailed discussion and analysis of the key concepts, situating them within the context of social media and the conceptual framework employed in analysis of the findings. In Chapter 3, the research methodology and design methods are outlined. The data collection methods as well as the underlining scaffolding that informed the data collection process, the data sources, the description of the research site, participants, and process of data analysis. In Chapter 4 the research findings are presented, analyzed and discussed in three main sections based on the research question. Chapter 5 sums up the research, with discussion on the implications, areas where the findings are applicable, and recommendation for educators and platform developers, and future researchers.

Chapter 2: Literature Review

The chapter is divided into four sections. The first section explores existing concepts and theory on agency in online environments with subsections that highlight a thematic conceptualization of the digitally mediated self, online content, technology, and identity. The second section highlights existing explications of interactivity, with analysis of key concepts that are related to social media platforms. The third section on social cognition provides a brief historical perspective, its development in children, and aspects that are applicable to social media research. The last and fourth section covers the theoretical framework that informs the analysis and presentation of results in this study.

2.1 Examining Agency in Online Environment

Studies into human agency and teenagers have often been conceptualized in terms of youth and media, literacy and learning, participatory online culture, and social justice (Hauge, 2014; Lindgren & McDaniel, 2012; Portante, 2011; Reyman, 2013; Roger Smith, 2009). In the context of this research, agency in online environments represents the interrelated web of motivation, engagement, and voice that constructs the individuality and capacity to act towards a desired goal within interactive online platforms (Rector-Aranda & Raider-Roth, 2015). Luke (2002) posits that agency experienced online is brought on by the increasing contemporary dependency and use of technology:

By accepting telepresence in lieu of physical presence, digital image in lieu of face-to-face speech, and virtual organization of materials on the move between many locations in lieu of physical control over materials at rest in one location, computer networks are fostering digital agency as a normal form of subjectivity. (p. 135)

The acceptance of technological innovation as evident in its wide adoption as a medium for communication and social interaction has resulted in digital or online agency materializing as the

fusion of intense utilization of technology across the spectrum of everyday existence. The conceptual construction of agency online is one ascribed to digitization, which as Luke (2003) points out, produces people who are *netizens*—“digital beings [with] cybernetic subjectivity” (p. 134). The outcome is their ability to be connected online 24/7 and have multiple avenues for expressing personalities and sharing interest across multiple platforms. Agency in online and virtual environments is more complex than the binary delineation of participation-consumption (van Dijck, 2009) or free will-determinism (Emirbayer & Mische, 1998). In discussing agency, van Dijck (2009) suggested that “we need to account for the multifarious roles of users in a media environment where the boundaries between commerce, content and information are currently being redrawn” (p. 42). The levels of human agency (user, collective, and social structure) are repolarised in virtual and online environments (Luke, 2002). *User* and *collective*, or social structure, is comprised of both humans and non-humans (e.g., user, culture, technology, and content). The underscored argument here positions technology-mediated communication as reconfiguring and altering social interaction due to the ubiquitous nature of computing, where relations among peers are constantly being sustained within these spaces, around the clock.

Agency becomes multifarious due to it being composed of variable orientations that changes with the flow of time and space (Emirbayer & Mische, 1998) and as such it should be examined in specific states (for example user agency in online spaces) to grasp how structural environments dynamically alters it. In media and technology studies, user agency is often cast as participatory engagement, in cultural theory, and consumption, within economic theory, respectively (van Dijck, 2009). However, to understand the implications of technological transformation it is important to outline the power relation between technology and users, in view of highlighting the multifarious concept of user agency. Online agency implies the presence

and performance of human and nonhuman activities, which exert influence on how agency is enacted within the digital space. Agency is described by Luke (2002) as embodying and mediating personified material existence of one's self. For example the anonymity afforded by messaging apps such as *YikYak* and the timed self-destruct communication within *SnapChat* affects how teenagers use these technologies, define, and express themselves while using such communication media.

2.1.2 Producing the digitally-mediated self

Online social networks and virtual environments become avenues for forming and enacting abstract identities of the self (B. Smith, 2010; Turkle, 1999). Luke (2002) referred to cyberspace within these environments as *metaterritorial* domains— the “networks of networks that work beside, behind or beneath it”, which create “elaborate *e-structures* and *e-haviour*” for example, online persona (p. 153). In “Cybercritique”, Luke (2002) asserted that “the proliferation of digital networks provides sites where particular forms of existence do become so concretized that online agents can act, do activities, and conduct business” (p. 134). This *form of existence* is the digital-mediated self— the online persona of users. The *self* in relation to agency is a non-metaphysical substance, thoroughly relational and dialogical in nature (Emirbayer & Mische, 1998). Turkle (2002) pointed out that “[if] traditionally, identity implied oneness, life on today's computer screen implies multiplicity, heterogeneity, and fragmentation” (Turtle, 2002, p. 7). In this description, the online *self* becomes fluid, non-stable and nomadic as users adopt different representation of their true self to suit prevalent practices in the particular online platforms in use at the time (Abiala & Hernwall, 2013). Advancement in interactive social technology presents novel opportunities for drawing out and leveraging agency (Lindgren & McDaniel, 2012), by providing new avenues for users to connect, customize, and share in content and communities at

their convenience with ease of access. Hauge (2014) points to research studies that highlight youth participation in online communities to connect with other youth and through this process find common interests and forge alliances, adding that they engage social media frequently in order to build networks. Earlier studies highlighted that youth employ social interaction to forge *self* definition (Deaux, 1993). Understanding agency and the resulting complexities arising from the use of social web technologies requires more than recognizing the social and participatory activities that occur in these platforms. This requires recognition of the production that occur in these spaces as well (Reyman, 2013), such as the production of the digitally-mediated self, content, and relations.

In Rector-Aranda and Raider-Roth's (2015) study into online role-play simulation, student agency, and voice, they identified dimensions of agency expressed by students in online virtual environments. Students were able to fully express themselves and enact agency through character portrayal—expressing both their *own* voices and that of the *character* they played within the online platform. In the first state of *own* voice, students expressed themselves (ideas, opinions etc) through their character. In certain instances, their character's opinion was coalesced to align with their own. In the *character* voice state, students had the “ability to speak from a perspective that is not their own”, this consequently “challenges them to see things from a diverse perspective” (Rector-Aranda and Raider-Roth, 2015, p. 7). In addition when they held the same opinions and beliefs as their character or when other users within the platform expressed similar sentiments, it further validated their held opinions or belief. These dimensions can clearly be observed and are applicable in interactive online platforms and multi-user online gaming sites. The *own* voice state typifies platforms like Twitter, SnapChat, YikYak, where users often express themselves through their alias such as a *twitter handle*— pseudonym

username— to engage in personal or community based interactions. Users' expressions are either verbal, or written like comments, and non-verbal such as *retweets*, *likes*, and *thumb up* of content based on their own opinion. In the *character* voice state, although Rector-Aranda and Raider-Roth (2015) commended this for allowing children to express themselves from a different perspective and provide an experience, view, and opinion distant from theirs, expressions based on the *character* voice usually enabled the participants to voice opinions that they would not normally do in their real identity. This was evident in the cyberbullying case at Whitney Young High school in Chicago where a female student was constantly mocked on anonymous messaging app *YikYak* after being sexually assaulted (Valencia, 2014). This practice is also rampant in online virtual gaming sites where players usually *trash-talk* each other under gaming identities and is widely acceptable as part of the gameplay (Conmy, Tenenbaum, Eklund, Roehrig, & Filho, 2013). This ritual of *trash-talk* in a gaming environment, although it appears harmless to the perpetrator and gaming community, can result in abusive language and cyberbullying in gaming circles as observed in the *gamergate* scandal (Chess & Shaw, 2015). Taking on the role of their character enacts a new form of online agency. Rector-Aranda and Raider-Roth (2015) highlighted that “students generally appeared to take on the roles of their characters whole-heartedly; with several stating that by the end their in-character responses had become spontaneous and natural” (p. 7). Although the assumed character may be distant to the real user playing it in many respects, having assumed and acted in this role repeatedly, the manner in which the user responds in the state of their online persona becomes almost second nature. Rector-Aranda and Raider-Roth (2015) also pointed out that children construct their online persona as they understand or imagine it in relation to other online users. This enables them to exercise their agency in the process. For example in the multiplayer online role playing

game World of Warcraft, when gamers play as specific warriors or warlords, avatars in the game, they attempt to interpret and assume the personal identity and characteristics of the avatars based on their features and attributes when communicating with other players (de Larios & Lang, 2013).

2.1.2.1 Constructing identities in social networks and virtual environments

Online social media networks and virtual environments offer an emulation of identity through computer-mediated communications, affording adolescents a medium to explore expressions of the self (textual, ocular or vocal), free from many inhibitions of the physical world (Luke, 2002; Turkle, 1999). Tucker et al. (2012) referred to this as the *technologization* of identity and subjectivity, and classified it as “the relational production of bodies and information” (p. 11). Turkle (as cited in Luke, 2003) described it as the new e-formations, where people substitute “representations of reality for the real” (p. 156). This is constructed when daily interaction becomes profoundly interwoven and digitally mediated with technology more than the physical body. Within social networks, the concept of the self is expressed in information; hence, what is often viewed as a user (pictures, posts, etc.) is the digital representation of the user. Understanding how and why online identities are developed and employed within online social spaces and virtual environments is of critical importance to understanding issues such as cyberbullying, which is a result of the online *self* or identity being the first medium of contact. The manner in which personal identity is constructed and enacted within social groups online affects how one acts and participates in such spaces and within those settings. The emergence of cyberspace and online communities became an avenue for one to reinvent, experiment, and explore new identities with different aspects of the social world that spans borders, space, and time (Abiala & Hernwall, 2013; Floridi, 2011; Turkle, 1997, 1999). The spatial self depiction is

multifaceted, fragmented, and riddled with many versions and audiences (Schwartz & Halegoua, 2014), where online identities are now cross-platform. For example, Instagram requires a Facebook account for login and to use the site, resulting in the transfer of a user's Facebook identity into Instagram, with the two accounts linked. Although a user might desire to keep both identities and audiences separate or certain aspects of the Facebook identity hidden from the Instagram audience, this results in the fragmented nature of online identity. This leads to a cluttered and sometimes contradictory plethora of online identities aimed at different audiences within different contexts. The result is that online identity becomes undefined (Rodogno, 2011), as the specific online platform and audience have to be taken into consideration. However in the case of cyberbullying, this transfer of identities across platforms might indicate the far reaching effect on a victim of cyberbullying as abuse and, as a consequence, can transcend the initial platform of occurrence to related online platforms, following the victim.

Online identity production have been categorised into three forms within social networking sites; the first is based on *group membership*, where a user creates an identity that fits well into an existing online group. The second formation is identity based on *anticipated audience*, where “people are conscious of who is viewing their online constructions and thus, they actively construct the ideal self formation in line with how they want to be perceived” (Heivadi & Khajeheian, 2013, p. 549). The third formation is online *identity based on offline association*, where identity is constructed in alignment with offline friends. In this setting the online space becomes an extension of the offline association (Heivadi & Khajeheian, 2013). In defining one's self in social context, forming identity is often based on affinity intergroup relations, as subjects tend to attune themselves to people who they feel or think are quite similar

to them (Deaux, 1993). In the case of online identity formation, offline influence and subjective position are drivers.

Social media prevalence has placed emphasis on online identity, which has to be created to use these platforms. Most users desire anonymity in certain aspects of their online interactions in social media and this has led to users creating false, misleading, or fake identities. The outcome is that “these fake identities are then used for a wide variety of purposes from whistleblowing, to undercover investigations to more nefarious uses such as defamation and harassment” (Lackey and Minta, 2014, p. 450). Taking a different view on anonymity, Abiala and Hernwall (2013) earlier stated that “the possibility of acting anonymously on the internet fosters not only identity exploration, but also carries with it emancipatory power” (p. 954). In this instance it allows a user to explore social spaces that they may not be able to do in person, in their true identity or real life. This places emphasis on the importance of the social setting where online identity plays out as well as the role when subjects become engaged in online social interaction.

2.1.3 Agency in producing and sharing content

The power structure and symmetry of mass media of the social web has shifted from top-down to user-driven platforms in terms of content (Ariel & Avidar, 2015). Rector-Aranda and Raider-Roth (2015) and van Dijck (2009) both highlighted the agency and engagement of youth in online spaces, as most users want to be viewed as more than just users of these platforms and technologies. For example, gamers within virtual platforms often record their gameplay and share these videos within social media. They view these game play videos as their *piece of work* that emphasizes in part their identity as gamers and online users. In *The Third Wave*, Toffler explored at length how this future trend would necessitate a new conflation of consumer and

producer, and referred to them as *prosumers* (Toffler, 1980). This opportunity has resulted in the reconfiguration of technology use, where previously users were consumers as seen in the case of Yahoo Messenger and Microsoft MSN chat, where users simply used the service for communication. The advent of more interactive platforms has renegotiated the relationships among users, producers, and technology. Understanding user agency requires highlighting an insight into what van Dijck (2009) referred to as the *multifarious role* users play online. In the contemporary context, users want to be seen as more than consumers, such as co-creators and producers, within these spaces. User agency online is increasingly becoming defined in terms of production and less in terms of consumption, or *prosumption* (van Dijck, 2009), producing identities, communities, culture, and content (pictures, videos, or memes). As an example, previously teenagers would use the service of Yahoo Messenger for communication with friends: Yahoo provided the service—the technology—for this communication. In the present contexts, users just don't use the service provided; they also create/produce the content other users view and interact with (e.g., the (re)tweets, trending culture, the viral videos and memes, as well as the number of followers, *likes* and view counts). On a majority of social media platforms like YouTube and Facebook, users to a large extent self-censor content by acting as moderators in a peer-based process and can flag or report content deemed inappropriate. The platform owners claim this democratises the process and ensures that the content most people find offensive is removed or investigated. This alters agency online since users play *multifarious* roles of consumer, creators/producers, audience, and arbiters. van Dijck (2009) asks then “what role do platform providers play in steering the agency of users and communities?” Due to users producing the content which draws and drives visits and clicks to these sites, platform providers have been hesitant to limit or restrict their activities or posts. If users are the ones creating the

content that attracts other users to these sites this creates a power shift and this gives the users “more power over content because they add business value” to these sites (van Dijck, 2009, p. 46). To highlight this point, *Reddit*, an online content aggregation website, with over a 1.5 billion monthly visits, made headlines due to reports of incessant cyberbullying and harassment, more specifically, the *gamergate* and revenge porn controversies as reported by mainstream news media (Brocchetto, 2015; Griggs, 2014; Kelly, 2015). The site became notorious for a free-wheeling ethos of open expression of offensive content and forums called *subreddits* (*r/jailbait*s, *r/transfag*) turned racist, hateful, and misogynist in nature (Fitzpatrick & Griffin, 2012; Lewis, 2015). Others such as *r/fatpeoplehate*, include comments and photos of over-weight people that are shared and shamed. *Subreddits*, such as *r/fatpeoplehate*, attracted a large number of active users (under pseudonym identities) as well as abusive comments. These forums were popular among sub-members who visited the site and the peer-based monitoring failed to address this until Reddit users outside these forums and the news media in 2011 became aware of this practice and the company stepped up to address it and intervened more firmly in 2015 by banning such forums (Goldman, 2015; Kelly, 2015). The creator (alias *Violentacrez*, real identity-Michael Brutsch, as revealed by *Gawker* magazine) of the *r/jailbait* forum (a *subreddit* of sexually suggestive photographs of teenagers), informed CNN (Cable News Network) that he received an award from Reddit for driving web traffic to the website through his *r/jailbait* forum (Fitzpatrick & Griffin, 2012). Reddit maintained, when questioned by CNN about these forums in 2012, that they were not an editorial website and strongly believed in free speech, as each forum had moderators which monitored the forum’s content (Fitzpatrick & Griffin, 2012). In this case, Reddit attempted to absolve itself from the controversy by pointing to the content as the *creation* and *product* of its users. The question this raised, points to an earlier one, where van

Dijk (2009) asks “now that citizens have become creators and arbiters of media content, what role do platform providers play in steering the agency of users and communities” (p. 43)? More recently, a group of Reddit users formed a Facebook page called *Project Harpoon* and moved to trolling by photoshopping images of *plus-size* models and actresses to make them appear thinner. This act was in response to the critique of the body-sizes of female game characters as not being realistic reported across mainstream media (France, 2015). The edited photos were shared across multiple tweets and posts on Facebook. The group refused the label of their action as being malicious or offensive, especially since they clearly stated no hate speech or shaming within the caption of the edited photos. They viewed the edited work as their interpretation of the photos. The *Project Harpoon* Facebook page was not initially taken down but with increased public outrage and media coverage the Facebook group was shut down. When examining occurrence of cyberbullying and antisocial practices online, it is essential to take into account and examine user agency within the interactive online platforms, the cultural complexity and the technology structure these platforms play in steering and directing its users.

2.1.4 The technology structure and agency

The technology underpinning a large number of social media sites and apps is designed to mine information derived from its users (Tucker, Ellis, & Harper, 2012) through algorithms, which often manipulate content of what users see (e.g., top rated/favourite content such as tweets, videos and news story). Luke (2002), in discussing agency as enacted by social structures, asserts that “online environments are populated by complex constructs that are tasked to perform certain pre-specified tasks, and such software agents capture other common meanings of agency in their origins and operations” (p. 134). For example, virtual platforms such as *OpenSim*, *SecondLife* and *Minecraft* are developed for creating digital selves and virtual

communication; hence they capture a user's interpretation of their identity in digital form. Tucker et al. (2012) added that "framing humans as the primary source of agency is no longer a useful or valid method; instead we must broaden the scope to include the multifarious technological activity that shapes our lives". Subsequently adding that the "increase in technological capability suggests decreased human action" (p. 12). Smith (2010) questions agency as self-expression vs. issue of association dichotomy on platforms like Twitter where *retweets* (which require recognition of the original post and user) and hashtags (which automatically associates a user with content, subjects, or themes) are far more common than original messages and individual posts. The notion here is that the more we use and are dependent on technology; the fewer agencies we have within these platforms. van Dijck (2009) added that as such, user agency and participation is "thus an ambiguous concept. The presumption that new networked technologies lead to enhanced involvement of recipients as well as to active [digital] citizenship is rather generalizing" (p. 45). The arguments made by these authors is that any study into human agency within online social spaces and virtual environments, must critically examine the role these platforms play in endearing or abating human agency.

2.1.4.1 Impact of the technological structure

Luke (2002) critiques the technology structure of the internet. More precisely, he critiques online social platforms and the interactive media that it affords its users, and highlights that the "provisional reading of online agency and virtual structure articulates a critique of their workings, because these agency-structure formations are remediating familiar inequalities in position, power, and privilege that exist offline with digital relays into these new virtual structures" (p. 135). However I would argue that this notion is not necessarily played out exactly

in those terms. While online social media and virtual platforms do often replicate inequalities experienced offline, this is often only the case when anonymity or veiled identity is part of the feature or one where rancorous culture runs amok within the platform as seen in the case of *Reddit*. Features embedded in a platform design can undermine a certain realization of identity (Rodogno, 2011), or manner in which users interact. Take for instance apps like YikYak and Snapchat, which offer anonymous messaging and self-destruct messages respectively. These specificities encourage teenagers to portray an uncensored *self* with unfiltered utterances while using these apps. The embodying interaction within these spaces is seen as impermanent and as such consequences of actions are also viewed along this same line.

The anonymity afforded within most online social media and virtual platforms often do encourage cyberbullying and uncivil social behaviour. Another instance of this is the case of *Ask.fm*, a social networking site for posting and answering questions. This site has recently been in the centre of two key cyberbullying cases, which resulted in the suicide death of the victims (two vulnerable teenage girls) as reported in the news media (Kendrick, 2014). It allows its users to ask and respond to questions on its website anonymously; this practice resulted in a high number of users posting very offensive and abusive comments, as with the case of the two teenage victims. Luke (2002) highlighted the disruptive nature and far reaching consequence online platforms have offline and argued that:

Consequently, the accumulation of all the Net's operational capabilities now constitutes a vast incorporeal engine of agency and structure for acting in virtual realities. Yet, these online cooperant possibilities also provide other concrete means for power to gain actualization, incarnation, and effectuation offline in physical bodies and social groups. (p. 140)

The effect of individual online agency employed through the means of features such as anonymity has an impact that transcends the virtual sphere within these online platforms to

consequences offline in the physical world, affecting physical bodies and vulnerable social groups. While the features proffered by most social networking sites and virtual environments enable a means for self expression and definition, they have become what Luke (2003) highlighted as liberating and at the same time, abusive and disruptive:

The virtual structures that informatic networks make possible are now expressing a quite disturbing politics on many different levels. While a few are somewhat liberating, and some are fairly exploitative; in the end, they are highly disruptive. (p. 136)

Luke (2002) noted that agency in cyberspace is utilized “to serve a panoply of offline agendas” and these offline agendas operate in the digital domain to create commonalities with other users, and in certain cases enmity, which are “pitched against their offline interests” (p. 137). He views the vision of *netizenship* as naive, stating that such views imagine connectivity as a medium that creates strong common interests, shared goals or communal values among human beings; however, the reality is that inequalities offline translate online with “the old contours of inequality, abjection, and powerlessness experienced in the world of atoms are all too commonly found in the realm of bits” (Luke, 2002, p. 152). For example studies have highlighted that teenagers who reported being victims of cyberbullying also reported offline cases of victimization during the same period (Ševčíková, Šmahel, & Otavová, 2012; Sticca et al., 2013). This underlines that cyberbullying does not occur in isolation and is linked to real world antisocial behaviour and as such social networks and online platforms do replicate incidences of the real world in virtual spaces (Bentley et al., 2017).

As network subjects, we are enfolded by virtual structures (Luke, 2002) in the sense that the clear boundaries of the physical world become blurred online when we are able to act under veiled identity. In these states and spaces, users turn out in whatever identity they assume. Turkle highlighted this: “you are what you pretend to be...you’re what you play, But people don’t just

become who they play, they play who they are or who they want to be or who they don't want to be" (as cited in Luke, 2002, p. 156). On another note, constantly communication and interaction through a technology medium often desensitizes users to the far reaching effect and impact of their actions online. Turkle (1997) noted this impact of the technological structure to the enactment of self, observing that mediated communication through technology presented a moratorium, not in the conventional sense of taking a break away from existence but a created space where users live parallel lives in tandem to their lives in the physical world. Turkle (1997) described it as follows: "adolescent moratorium is a time of intense interaction with people and ideas. It is a time of passionate friendships and experimentation" (p. 1102). The space of the social web gives users the unlimited ability to explore, interact, and experiment with the self; however the resulting agency produces a break away from the impact of action. This space is not where the notion of self is suspended but a space where the consequences of actions are suspended: "It is a time during which one's actions are not 'counted' in quite the same way as they will be later" (Turkle, 1997, p. 1102). Users of social networking sites and apps acknowledge the importance of the veracity of their connectivity, however the perceived notion of the impact their actions generate is not acknowledged in the same manner. Turkle (1999) noted that while experimentation with the self online facilitates the development of the core self, the deriving actions are thought of as relatively consequence-free, stating that "they are not given as much weight, not even the force of full judgement. In this context, experimentation can become the norm rather than a brave departure" (p. 644). Technology has altered the traditional notion of self previously defined by the physical body; in this instance, users utilize features within social and virtual platforms to mediate themselves online. The challenge this poses is how to address the "arrangement for who dominates who from both inside of as well as outside of

virtual structures”, as this is a question of “*informationalization* for platform designers, owners and users” (Luke, 2002, p. 157).

2.2 Interactivity and the Social Web

Interactivity as experienced online in SNS’s, apps, and virtual environments has been the subject of scholarly debate over its definition, concept and measurement. Theoretically treatment has often been arduous and, given the term itself, scholars have argued whether it only exists in human-to-human communication, whether communication can be defined as such only when there is reciprocity of message, or whether it lies in the perception of users and if the medium solely defines what is interactive (Ariel & Avidar, 2015; Kioussis, 2002; Quiring, 2009; Richards, 2006). Historically, interactivity had previously been associated with traditional mass media (for example television, radio) and communication (like the telephone) as solely between humans in transmission (message) exchange (Steuer, 1992; Thurlow, Lengel, & Tomic, 2004), with limited or no detailed relation to the content that sustains such interaction. However the rapid deployment of the internet in services such as social media and advancement in human-computer interaction (HCI) provided the contemporary context for the re-conceptualization of interactivity, with focus on user generated content and non-human entities.

Steuer (1992) defined interactivity as “the extent to which users can participate in modifying the form and content of a mediated environment in real time” (p. 84). Kioussis (2002) takes a similar line of definition and describes interactivity “as the degree to which a communication technology can create a mediated environment in which participants can communicate (one-to-one, one-to-many, and many-to-many) both synchronously and asynchronously” (p. 372), further highlighting that reciprocity of communication (third-order dependency) is vital to the process among the interacting entities with multiple levels of

variables that define its nature. Richards's (2006) assertion of interactivity focuses more on the process and content and less on technology, pointing out that interactivity goes beyond the exchange of communication, to one of generating content, stating that: "interactivity is a contextualizing facility that mediates between environments and contents and users and enables the generation of further content" (p. 532). In this case it is not seen as an inherent attribute of a medium defined by technological characteristics but a *process-related* variable, an attribute of any communication process (Ariel & Avidar, 2015). In online spaces and virtual environments, users produce data through collaboration and interactions. Reyman (2013) sums up this notion of users online and elucidated this process:

[Subjects] are acting neither as autonomous composing agents nor as mere bystanders in the generation of a technology by-product [information]. Rather, they are working collaboratively with other users, texts, and technologies to create content, form networks, and, ultimately, write the social Web. (p. 516)

Reyman (2013) views the generation of content as not only initiating interaction but sustaining it among users through the collaborative process of content generation. Kiouisis (2002) earlier highlighted the context (drawing from *media interaction* that exist between a reader and text) to refute defining interactivity as solely between human entities and observed that "[a]ccordingly, the simulation of interpersonal communication in an interactive environment is not just confined to human-to-human communication, but includes human-to-machine communication as well" (p. 364). Richards (2006) provided another compelling argument to include nonhuman entities in discussing interactivity online:

Interactivity is not just about 'exchange' of communication but also generation of content. Who is doing the generation is in itself an important question. We are now moving into an era where there will be further opportunities for users to engage with applications as facilities where the personal context of the user informs the content of the package and/or where the contextual framework supplied requires the user to supply some or all content and/or where the contextual framework itself is supplied by the user.

These opportunities constitute qualitatively different activities that are not just about communication between people (p. 533)

A key point here is that when users visit a social media platform, they are primarily mostly interacting with the content created by other users with direct human-to-human interaction becoming secondary in the process. Here the focus of interactivity is between users (human) and content (non-human), this forms the context and basis for explicating interactivity in the social web. If this notion is to be accepted, then the dynamics of the medium itself also calls for a re-theorization of interactivity. Carter described in part these dynamics:

Thousands of users spend many hours each week "living" in virtual communities, each with its own residents and laws and even politics. In these virtual communities, users interact with others whom they know only in their online personas, which may be quite different from who they are in their offline hours; thus the *residents* of virtual communities as more welcoming — and even more real — than the world with which they spend the rest of their time. (as cited in Luke, 2002, p. 155)

Carter points out a significant practice and mode of interactivity online, where people are in constant daily interaction with others online only in the mediated state of virtual presence. These online communities exist solely as an entity in virtual space, and develop their respective acceptable practices and behaviour. The extent to which these dynamics impact the perception and nature of interaction among users within a platform is one of the questions this study hopes to address. To surmise, interactivity within the social web is one that is virtual (in state), situated (users have some form of presence), and mediated across environment, content, and users.

2.2.1 Concepts and dimensions of interactivity

One of the theoretical questions surrounding the discussion of the concept of interactivity is whether it exists in the mind of users as a perception during communication, and what considerations are given to the multiple levels of variables in such exchange or if it is simply an affordance linked to a *medium*, and, lastly, whether it is more of a process (Ariel & Avidar,

2015; Kiouisis, 2002; Steuer, 1992). Steuer (1992) argued that it is a function of both a technology medium and perception (in the receiver's consciousness). Kiouisis (2002) assumed the same position and characterized interactivity into three major dimensions: (1) the structure of a medium, (2) the context of communication setting, and (3) the perceptions of users. Richards's (2006) user-focused model falls within interactivity as *medium* while Ariel and Avidar (2015) in addition to the existing dimensions of perception and *medium*, explicate interactivity as a *process*.

2.2.1.1 Interactivity as perception

In exploring interactivity as perception, results would vary among individuals and fluctuate if the technology properties are altered. Kiouisis (2002) noted that such a perceiver-based outlook provides a new path for researchers to explore and asserted that "ultimately, any evaluation of interactivity from such approaches does not lie just within the technology, but in perceptions of users themselves" (p. 364). This dimension seeks to measure and examines users' (expected) level of interactivity experience on a particular platform. The perspective employs schema in recalling users' previous experience in measuring present perception. In this case, a user's actual interaction is measured against the perceived and expected interactivity. The focus is solely on the user's current perception after an interaction with a platform, and the psychological and social characteristics of the user's experience are paramount (Ariel & Avidar, 2015; Kiouisis, 2002).

Steuer (1992) drew attention to perception of *presence* (the ability to sense one's physical environment in a mediated space) and *telepresence* in virtual interaction since users are accustomed to face-to-face interaction in the physical world, noting that it impacted the perception and interactivity within a platform. In an unmediated state, *presence* is taken for

granted but once a user is situated in a mediated environment by technology, they are forced to perceive two separate environments simultaneously, the physical environment and the environment presented via the medium (Steuer, 1992). The environment presented via a medium forces *telepresence* (that can exist in aspects such as gaming), Kiouisis (2002) defines it as “the degree to which users feel that mediated environment take precedence over physical environments” (p. 367), more precisely “telepresence is the extent to which one feels present in the mediated environment, rather than in the immediate physical environment” (Steuer, 1992, p. 76). *Telepresence* is employed to induce *presence*; it differs from *presence* in the sense that in *telepresence* a user is able to sense that other users exist inside the mediated environment. For example a user playing a game can sense that other users exist, but they are not seen in terms of real world bodies but seen in terms of *in-game* characters, *presence* on the other hand relates to real world bodies and the physical world.

2.2.1.2 Interactivity as affordance of the (technology) medium

In this analysis, the *context of communication* and *structure of medium* are grouped under *medium* since they both deal with aspect of interactivity external to the user and directly linked with the technology, platform, or device. The technological affordances of a platform aids in generating activities that enhance interactivity among its users while other factors such as speed, interoperability, real-time, range, and mapping also play a role (Kiouisis, 2002). Ariel and Avidar (2015) discussed interactivity as *medium characteristic* and assigned labels to various platforms based on “high” (such as social media networks accessible by smartphones and tablets) or “low” in traditional media (for example TV and radio) interactivity level. In this dimension of interactivity, I have delineated two key concepts that are central, *reciprocity* of communication

and the *positioning* of the user. The technological structure of the medium defines the context in which interactivity is discussed.

Reciprocity

Within the context of interactivity as a *medium and structure of communication*, reciprocity is highlighted as a vital aspect of interactivity (Kioussis, 2002). Three key concepts can be drawn from Kioussis (2002) work on interactivity: 1) it consists of two-way or multi-way communication mediated by a channel in which the roles of sender and receiver are interchangeable, with room for reciprocity of communication typically referred to as third-order dependency; 2) The interaction can exist between humans or machines but this is dependent on both the human and machine functioning as both senders and receivers (A side note to this dimension, especially in the context of human-to-machine coupling, is that interactivity is said to exist between agents as long as they are both autonomous. If one agent loses autonomy and the other becomes the sole regulator of the coupling then interactivity is said to no longer exist) (De Jaegher, Di Paolo, & Gallagher, 2010); 3) The actors in the interactive experience should be able to some extent, manipulate the content through a mediated environment and be able to perceive differences in the levels of interactive experiences. This concept of interactivity assumes that there are always two active users, and that there exist some tangible object that is transmitted between the two users in any given instance. The inclusion of the mode or process of message distribution in Kioussis (2002) work is indicative of a variety of communication technology devices as tools for mediating interactivity in real time, that range from mobile phones, tablets, video games, social websites, and virtual reality systems. These all hold different capabilities for message distribution (for example a mobile phone is capable of one-to-one communication as well as one-to-many) and in some cases human-to-human via machine or human-to-machine.

Positioning

Richards (2006) drew on Bourdieu's notion of the *field* (writers as producers and audience as consumers) and proposed a concept of interactivity based on the *positioning* of the user in relation to the generation of content. The concept entails three user activity models: *consumer*, *processor*, and *generator*. In each context the user is able to consume, contribute, or repurpose content. In the *consumer* model, the user is being positioned by external forces or agent where they have no input or are incapable of altering the presented content. A typical scenario of this would be a media and technology firm gathering metadata on users' browsing habits to serve those users product adverts (online banner ads). The user in the *processor* model can shift between being a receiver to transmitter of information, contribute to existing content, and access further responses from other actors in the interaction. The *processor* model also places the user in the same environment as in *consumer* model "but with additional components that allow them to position themselves in order to take up opportunities to contribute" to the content (Richards, 2006, p. 541). In this model, user-to-user interaction as observed in social media platforms and collaborative technology that elicit user participation all fall within this category. The *generator* model alters the user role. A *generator* user can originate content, set the subject of content, and position other actors in the role of *consumer* or *processor*. Richards (2006) noted that this occurs when users are positioned "into places and spaces where they can author the content and/or the context of the environment" (p. 541). In this role the user has an audience and their own set of *consumers*. An example of this is YouTube where fellow users create original video content, share and have subscribers and viewers. User blogs and podcasts also fall into this category. It is important to note that while the user in this model is positioned in

authorship, they are still subject to a variety of infrastructural constraints (by platform owners) and remain subject to external agents as users in *consumer* and *processor* models.

2.2.1.3 Interactivity as a process

Ariel and Avidar (2015) noted that “interactivity exists as soon as there is an ongoing exchange of information in a communication process” (p. 23) and as such interactivity as *medium* characteristic is problematic. Kioussis (2002) drew a similar conclusion and questions whether “interactivity is a characteristic of the context in which messages are exchanged” or reliant upon the technology used in communicating the message (p. 356). The argument being put forward then is interactivity, which can be found in both new and traditional media, is more of a *process* than *medium* (hardware and software) that facilitates the communication (interactivity) and determines the level of interactivity among users. Rafaeli (as cited in Ariel & Avidar, 2015) proposed an interactivity model based on three types of communication processes. The first is *declarative* communication, which consists of one-way flow directional messages, as seen in online message boards. Ariel and Avidar (2015) view these messages as non-interactive with low responsiveness. The second process is *responsive* communication, in which the messages are two-way directional where the receiver reacts to a sent message and also becomes a sender by initiating an action to a message (as seen between user and computer in online gaming). The third process is *interactive* communication, which consists of two-way flow messages between sender and receiver in continuous interaction with interchangeable roles. Part of the process entails what Kioussis (2002) highlighted as *third-order dependency* (Figure 1, depicted as R1 to R2), where users in communication refer to prior transmission messages in present communication.

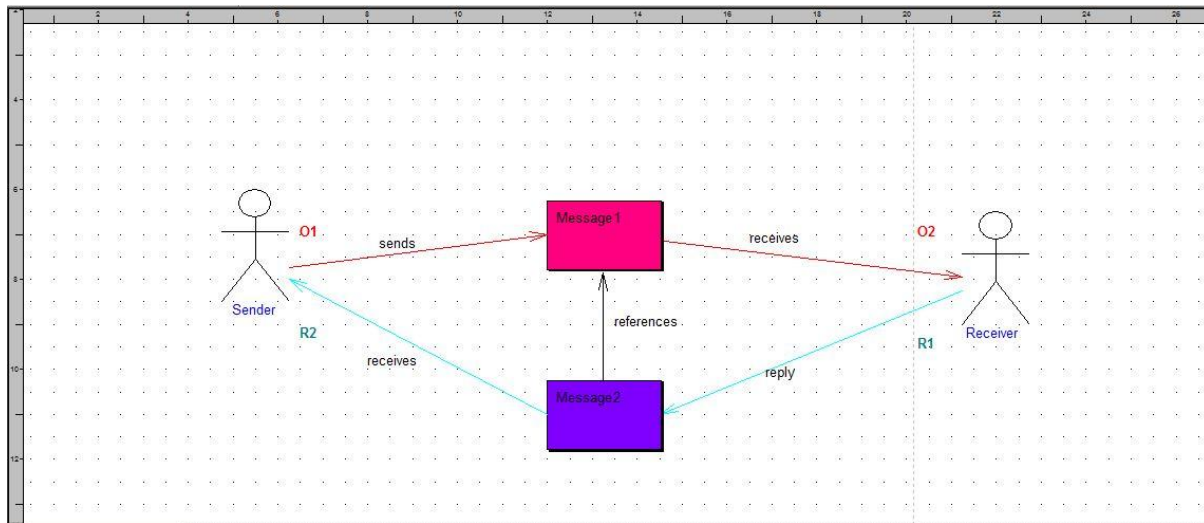


Figure 1: Illustration of Interactivity with Third-Order Dependency

Smith's (2010) study highlighted interactivity on Twitter during the Haiti earthquake in 2010 as an example of *third-order dependency*. Users using the hashtags #Haiti, #HopeforHaiti and #Igave connected with other Haiti supporters and online community on Twitter. The interactive communication was initiated as a result of users engaging in dialogue by *tweeting* and others acknowledging and *retweeting* their response. Smith (2010) pointed out that the online community used this means to debate the effectiveness and credibility of the relief efforts using hashtags like #whosincharge in #haiti to pose questions, and *retweets* were employed by other users to make questions trend and to reply to previous *tweet* questions (*third-order dependency*) or pose other questions in view of participating in the debate. In context, it is the process of users actively participating in the debate on Twitter that constitutes interactivity and not necessarily the platform (Twitter) or the option to send *tweets* or *retweets*, as these are affordances of the platform or interactive process. In this example, the context and focus of interactivity shifted from Twitter (the technology medium) to the debate and responses (message relationship). This

provides the means of theorizing and understanding how users interact within any given environment and the implication on a perception of human-to-human interaction.

2.2.2 Interactivity, sociability and antisocial behaviour

Ariel and Avidar (2015) perceive interactivity as a *process-related variable*, “where the transmission of information is at the centre of the interaction” (p. 24). In their view interactivity is an attribute of the process of communication and not inherent in a medium defined by its technological characteristics, they explained this point as follows:

For example, a Facebook page might contain several sporadic messages in a one-way style (low level of interactivity), whereas a telephone call might contain a vivid conversation among two friends (high level of interactivity). Hence, the perception of interactivity as mainly relevant to new media rather than traditional media is no longer accurate. (p. 25)

In defending their choice of interactivity as a *process-related variable*, Ariel and Avidar (2015) argued that the study of interactivity should extend focus from characteristics of a specific medium to the process of message transition, reciprocity, and the manner in which users transfer information among each other in a communication setting. In context, features of social media sites such as ‘like’, ‘dislike’, ‘share’, ‘comment’, ‘tweet’ or ‘retweet’ are affordances for interactivity and are not interactive in themselves. However if a website provided the feature to *ask* a question, the process of asking and getting response to that question is what underlines interactivity. Ariel and Avidar (2015) further suggested that social media platforms are void of being social based solely on their technological attributes, as the involvement, interaction, and active participation of the users is what determines its sociability. For example if users of YouTube, Facebook, or Twitter only visited the site to click ‘like’ or ‘share’ other user videos, wall posts or tweets on these sites without engaging in conversation with other users on the content of the videos, posts, or tweets, these sites will only be “a social enabling platform instead

of an actual social medium” (p. 25). In this analysis, sociability is determined by the level of interactive exchanges among users of the platform; the higher the number of user interactions and exchanges the greater the level of sociability.

Ariel and Avidar’s (2015) model of interactivity and sociability consists of four quadrants for measuring interactivity and sociability of a platform. The first consists of low level of interactivity and a low level of sociability. In this quadrant there are few users and low exchanges among them. The second consists of a high level of sociability and a low level of interactivity. In this quadrant, there are many users but active communication exchange is low. In the third quadrant user number is low however the exchanges are interactive. This quadrant consists of low sociability and a high level of interactivity. The fourth quadrant or communication setting consists of high levels of sociability and high levels of interactivity. There are many users and exchanges on the platform, which is mainly interactive. The setting in the first quadrant will apply to online platforms that are not popular and as a result do not attract a large amount of visitors.

The low level of interactivity could also be as a result of the platform not engaging in content to elicit user input. Examples of platforms for the second quadrant are popular sites where “users could *like, share, check-in* and even write post...but their contributions either do not refer to previous posts or do not encourage further interaction” (Ariel & Avidar, 2015, p. 27). Platforms on the third setting may consist of forums, or niche platforms like hobbyists, where membership is low but discussions refer to other comments and questions. Although with low user numbers, these interactive exchanges among its users are high and hence such platforms can be viewed as very engaging. The fourth quadrant can be said to be an ideal social media network. A *celebrity* Facebook page, news story or social trend page would be a typical platform in this

category with a high number of users commenting on contents and each other's post. It is important to note that other Facebook pages could fall into any of the previous quadrants, and the tone and content of exchanges are of no importance to the level of sociability and interactivity (Ariel & Avidar, 2015). However, interest, referred to as *social stake* by Smith (2010), in a topic increases the interactivity level of users on a platform. Richards (2006) highlighted the lack of significant coverage of content in Kiouisis's (2006) dimensions of interactivity. This criticism also applies to Ariel and Avidar's (2015) model. In the context of technology and interactivity, content is reduced in significance, as user personal interest and *social stake* are motivation for sustained interactivity (Ariel & Avidar, 2015; B. Smith, 2010).

The focus on the process of interactivity and not the features or technological characteristics of a specific platform, coupled with the level of active user participation and sociability of the platform, provides a novel approach to investigate and examine issues of antisocial behaviour like cyberbullying. For example Facebook and YouTube rank number two and three respectively (number 1 & 2 for social networking sites) on the list of the world's most visited websites (Alexa, n.d.), however more cases of cyberbullying have been reported on sites like *Reddit* and *Ask.fm* (ranked 8 and 725 globally) than either Facebook or YouTube (Alexa, n.d.; Nobullying, 2014). In context Facebook and YouTube separately have a higher level of sociability than *Ask.fm* and *Reddit* combined. The question this raises is why these trends of cyberbullying occur in these other sites more often? The answer could lie in the following; YouTube is a second quadrant platform with many users (high sociability) who visit the site to watch videos and although they interact with its content by posting comments, the comments are mostly non-interactive (low interactivity). van Dijck (2009) pointed to news reports highlighting this trend in social networks:

As a *Guardian* technology reporter observes, an emerging rule of thumb suggests that if you get a group of 100 people online, one will create content, 10 will interact with it (commenting or offering improvements) and the other 89 will just view it. (p. 44)

Ask.fm and *Reddit* are niche platforms (not necessarily in terms of user numbers but topic of interest); however they both have a very high level of interactivity, with users in constant discussion and communication with each other. As users collaborate to create the social web and the contents that drive online page views and mobile app traffic, platform owners are hesitant to curtail users' activities (this result in platforms like *Reddit* and *Ask.fm* cultivating practices among users that produces a toxic culture in the way users generate, share and interact with content). Taking a cursory look and comparing the number of comments, *likes* or *dislikes* on any YouTube video, the number of *views* are far greater than the user comments or *likes*. One of the most watched and popular video on YouTube (Gangnam Style by artist Psy) has over 2.5 billion views with 4.3 million comments that are mostly unrelated to each other. In context, people do not have to necessarily respond to content on YouTube but on *Ask.fm* responses are solicited for questions, the site elicits a high level of interactivity and as such the chances of inappropriate or abusive content is high. On platforms like YouTube, *view* count, *likes* do matter for video ranking etc. Although comments are written in response to the videos, they are often left unread or with no reply from the video creator and as such have less impact, the *view* count, *likes*, and numbers of subscribers are of more importance for the video creators. In most cases they see the comments to their video as stirring up conversation. However, on *Ask.fm* getting responses and responding to questions are important. Hence, abusive content has more potency as users would always want to see who has responded to their questions. This is not the case on YouTube where a user mainly checks for the *view* count and *likes*. Based on this, cyberbullying may not be linked to the level of sociability but to the level of interactivity. Online platform features such as *likes*,

share, and *tweets* do not usually generate a highly interactive environment (B. Smith, 2010), although they hold the potential; the ability to generate interactivity through them is limited. In examining communication processes in social network platforms, inherent platform interactivity should not be assumed. Emphasis should be placed on understanding the interactive nature of the platform. In an online platform with high level of interactivity and engagement, its users become fully aware and more perceptive to each other and content.

2.3 What is Social Cognition?

A key aspect of human interaction centres on it being sociable in nature and cognitive processes play an important role in this encounter (e.g., the ability of becoming aware of one's own thought/thinking in relation to others). Social cognition is described "as the perception of others, the perception of self, and interpersonal knowledge" (Beer & Ochsner, 2006). Baron and Byrne characterized social cognition as "the manner in which we interpret, analyse and remember information about the social world" (as cited in Pennington, 2000, p. 1). The *information* here is about oneself, others and the social context of the interaction taking place. The process involves attempting to know and understand others as well as ourselves in interactive situations. Additional exposition of social cognition described it as going beyond figuring others in relation to the self, but understanding others as well as understanding *with* others, highlighting that it is "the know-how that allows us to sustain interactions, form relations, understand each other, and act together" (De Jaegher, Di Paolo, & Gallagher, 2010, p. 442). This is vital to understanding the self and relevant to successfully navigating the social world. The processes involved in social cognition are recursive in nature, with each process interlinked (Sollberger, Rankin, & Miller, 2010). The mechanism within social cognition allows experiences within a social setting to be assessed and actions evaluated in terms of the degree in which they

lead to a desired result or outcome, for example how one's behaviour becomes modified to suit a particular context (Cross, Coleman, & Terhaar-Yonkers, 2014).

2.3.1 A brief historical perspective

Social cognition draws from social psychology and cognitive psychology (Zajonc, 1980). Social psychology in part focuses on the wider (external) context to the self (Pennington, 2000) while cognitive psychology entails perception and information processing, with emphasis on observable behaviour (Hogg & Abrams, 1999; Operario & Fiske, 1999). Social cognition grew out of the need by social scientists to focus their attention on processes that mediate people's responses to situations, rather than demonstrating the power of the situations themselves (Operario & Fiske, 1999). It provided the context for exploring multiple levels (individual, intra-group and intergroup/society) of explanation on the same focus of enquiry, and is not only concerned with the internal factors and related mental processes but the external factors that induce or inform these processes within a social context (Pennington, 2000).

One of the early criticisms of social cognition is that it adopts a reductionist, computational analogy and prescriptive approach that overemphasizes the subject as *asocial*, while the wider societal context of the subject is relegated to the background or ignored (Hogg & Abrams, 1999; Operario & Fiske, 1999). However this was during the early stages of social cognition still developing as a sub-discipline and due to the nature of the research and focus of enquiry at the time, the focus was to understand individual perception processing first, before exploring factors external to the self (e.g., Asch, 1946; Gardner, 1953; Lewin, 1936; Maslow, 1959; Rappoport, 1969). Subsequent research, centred on human interaction in social context, covered external factors that impact decision making, perception processing, and the self as well as individual intrinsic factors (Caporael, 1997; Glenn, Johnson, Kimmel, & Wedge, 1970;

Knottnerus, 1988; Turner, Oakes, Haslam, & McGarty, 1994). In contemporary studies, social cognition was employed in examining the biological perspective of socio-emotional (visual signal) processing in the brain (Sollberger et al., 2010) and the stigma of gifted children. External factors like students expectations of gifted students and gifted students strategy for dealing with these expectations (academic performance) were examined (Cross et al., 2014).

2.3.2 Social cognitive development

An important aspect of social cognition within interaction is the ability of one to understand the mental states (intentions, desires and beliefs) of other individuals or, in other words, taking or considering another person's perspective. This allows for negotiating complex interpersonal decisions in social context (Brizio, Gabbatore, Tirassa, & Bosco, 2015). Children start exhibiting Theory of Mind (ToM), an aspect of social cognition between the ages of 4 and 6 (Brizio et al., 2015; Comparini, Douglas, & Perez, 2014). They develop the ability to understand and reason the mental states of others and at this age they "become increasingly capable of imagining another's perspective even if it is different from their own" and utilise it in physical interaction with their peers (Comparini, Douglas, & Perez, 2014, p. 1083). Children are able to achieve this because they learn through everyday social interaction with others in peer relationships. This enables them to negotiate, cooperate, and learn from one another in ways that differ from learning from adults (Comparini et al., 2014). This highlights a socio-cultural approach that develops an understanding of others. Comparini et al. (2014) suggest that this is made possible since feelings, beliefs, intentions, and desires are part of human daily activities and way of life in the social world and as such, children can observe mental states in other children and themselves. Through these kinds of interactions, children "work through their own and their peers' different and competing perspectives in engaging with the ongoing management

of their social worlds” (Comparini et al., 2014, p. 1090). Comparini et al. emphasized that children start using mental state verbs (such as *know*, *think*, and *want* and *need*) to express themselves from around 3 years old (developed by interacting with a caregiver, e.g., mothers at an early age). Children continue to express feelings, intentions, and beliefs as they grow older. They employed a methodology that requires children “to reason a story where the perspective of an outsider is replaced with an alternative presentation of the stimulus in which the child participates more directly” by substituting the outsider’s perspective for the child’s (Comparini et al., 2014, p. 1085). In such a scenario, since the child is removed from the perspective of an observer and immersed in the narrative, becoming an *interactant*, Comparini et al. (2014) concluded that this “supports their emerging understanding of others’ mental states in a way that a third-person story might not” (p. 1085). In resolving conflict, the children employed social cognition in not only understanding their peers’ mental state but also in making their own subjective state known to others by re-articulating how they would make a request or respond to their peers.

2.3.3 Integrative themes related to the focus of enquiry.

Social cognition can be applied within a wider theory as it works as a *metatheoretical* approach to examining social behaviour that focuses on the mental processes that guide interaction (Operario & Fiske, 1999). The aim of this section is not to provide an exhaustive list of concepts within social cognition; the discussed themes here are related to the focus of this research. In the context of the study, social cognition is being examined in relation to online social settings as found in SNS’s and other interactive virtual environments. This sub-section highlights and discusses the related and applicable themes.

2.3.3.1 Perception processing and the pragmatic

When humans respond to a scenario, the manner in which they encode and decode their response offers insight into the way they perceive the scenario and the mental processing employed. Social scientists observed that when explaining one's own behaviour, subjects tend to place emphasis on external factors, and when explaining another person's behaviour as an observer the emphasis shifts to dispositional factors. This is the actor/observer or the self-perception/other-perception dichotomy (Beer & Ochsner, 2006; Pennington, 2000). The reason for this change, Pennington (2000) noted, "is that when explaining our own behaviour our attention is more focused on situation constraints and how other people influence us. By contrast, when explaining another's behaviour our attention is focused on the behaviour" (p. 43), such a process may reflect or serve as a self-protection mechanism to reduce responsibility or since the perception is of oneself, you are privy to information that is absent when processing perceptions about others.

One of the integrative themes of social cognition that relies heavily on human agency is what is *pragmatic*: this is the goal-oriented, motivational and intentional bases of perception that guides mental processes and responses, derived from intrinsic sources such as personal-level variables and situational constraints (Operario & Fiske, 1999). For example, there exists a link between perception and experience of emotions, like observing an emotional state in others. This can induce the same emotion internally, as this emotional evaluation is linked to a subject's mental state and being able to relate to others or situations (De Jaegher et al., 2010; Sollberger et al., 2010). Comparini et al. (2014) highlighted children's social cognition development, observing how children utilize it in not only becoming aware and perceptive of their peer's mental state (feelings, beliefs, perceptions and intentions) but also in resolving conflicts. Earlier

work by Pennington (2000) highlighted three cognitive processes that users apply in dealing with information received from the social world: *interpretation*, *analysing*, and *memory commitment*. These processes are observed from a receiver's perspective and it is imperative to highlight here that the processes Pennington (2000) discussed were in view of physical social interaction but a majority of the concepts are applicable to online social interaction.

2.3.3.2 In-group categorization and culture influence

Perception processing does not happen in a vacuum. It is often influenced by information extracted or gathered in context from other people, or from previous experience. These *social schema* include “shorthand summaries of our social world and enable us to readily and easily code and categorise new information” (Pennington, 2000). A schema is the sum of all the prior information available to an individual forming an impression (Asch, 1946). Individuals typically apply *social schema* when dealing in *other-perception*, for one to arrive at having a *social schema* there is a process of *impression formation*, drawn from personal experience or through group association. As part of enacting social identity, individuals self-categorize into an existing group and assume the norms of the group (Oakes, Haslam, & Reynolds, 1999; Sherman, Hamilton, & Lewis, 1999). In this instance, the enquiry focuses on how the overt and covert ways the group norms and culture override the self (social influence), since groups have *ingroup bias* (where non-members are often seen and treated differently than those ingroup), and *primacy effect* (where information from another group member which is presented first has greater influence on the impression formed than later subsequent information) (Pennington, 2000, p. 66). In other words the early group members set the tone (*social schema*), norm, and ingroup culture.

Cultural competence is the situated societal culture or structural context in which an individual adapts their behaviour. This process itself and the resulting behaviour are derived

largely from ingroup standards and pressure (Operario & Fiske, 1999). Other studies referred to this as *social influence* or *social perception* (Brizio et al., 2015; Pennington, 2000). *Cultural competence* is also an evolutionary mechanism where members receive *social signals* (*social schema*) from the group, interpret and realign themselves to suit the existing ingroup norms (Brizio et al., 2015; De Jaegher et al., 2010; Pennington, 2000). For example, the concept of the self or the social self is developed within the wider concept of categorizing oneself as part of a group, taking on the associations and norms that holds the group in place (Sherman et al., 1999).

2.3.2 Social cognition, teens and social media

Social cognition has long been employed in research in view of understanding social interaction, conflict, the self in opposition to others, and group associations in physical interaction. Literature about teenagers and social cognition is scarce, especially when compared to studies into other age groups like infancy and childhood (Brizio et al., 2015; Comparini et al., 2014). Existing empirical studies with teenagers as the main focus propose no unified theoretical framework. In addition, given the increased use of technology through social media platforms by teenagers, extensive empirical studies into how social cognition can be used in examining the intersection of teenagers and social media are also limited. What exists in form of research are studies of internal perception processing of subjects, without highlighting external influences that impact these perceptions. Researching cognition and social media introduces an empirical and theoretical challenge, as only a handful of theoretical frameworks are sophisticated enough to account for the interactive element of cognition (excluding neurocognitive measurement) through the medium of technology. For example, constructivism under-theorised technology as a mere tool— an instrument, but not integral to understanding cognition (Petrina et al., 2008), and

as such is viewed as not having or playing a major role into how the self, agency, and interactivity are affected or impacted by technology.

Aspects of social cognition (internal perception processing) have been explored in research involving teenagers and social media, focussing on the lived experience of issues such as cyberbullying (Jacobs, Goossens, Dehue, Völlink, & Lechner, 2015; Parris, Varjas, Meyers, & Cutts, 2012; Ševčíková et al., 2012). Jacobs et al. (2015) and Parris et al. (2012) examined the perceived experience of cyberbullying victims with emphasis on the medium employed by the victims to cope with their experiences. Jacobs et al., (2015) studied *aggressive coping*, *passive coping*, and *active coping* as students' perspectives in dealing with cyberbullying while Parris et al. (2012) highlighted three perspective strategies for coping with cyberbullying; *reactive coping*, *preventive coping*, and *no way to prevent cyberbullying*. Ševčíková, et al. (2012) examined the perception of the online experience of cyberbullying victims across multiple contexts, such mode of attack (online or both online and offline), relationship (known or unknown) to the aggressor, and length of cyber-victimisation.

2.3.3 Social cognition and cyberbullying

The first cognitive process Pennington (2000) highlighted is *interpretation* or *interpreted* perspective. In this stage, the information a user received about other people (and oneself) is given meaning by means of interpretation in social context, previous experience, and cultural value. For example, Ševčíková et al. (2012) found that victims of cyberbullying perceived a greater threat and harm to themselves when there is a connection (direct or indirect) between themselves and the aggressor. The victim's perceived threat is due to the victim either being familiar with the aggressor or sharing a common acquaintance. In Parris et al. (2012), students reported using a *reactive coping* strategy after cyberbullying occurred. This strategy entails four

levels: *avoidance*, *acceptance*, *justification*, and *seeking social support*. In aligning Parris et al.'s (2012) findings with Pennington's (2000) social cognitive process, in this stage the student attempts to *interpret* the scenario in view of deciding which of the four *reactive* levels to adopt. Students chose *avoidance* "as a way to remove oneself from the situation thereby avoiding the negative effect that can result from cyber-victimization" (Parris et al., 2012, p. 292): 80% of students in the study chose this option. This option involves completely erasing correspondence and contact with the aggressor. How effective this strategy was in addressing cyberbullying was not highlighted in the study.

In the *acceptance* and *justification* level, students interpret the cyberbullying as part of using social media platforms and as a temporary occurrence. On the other hand, an interpretation is carried out to determine reasons why cyberbullying occurs with most attributing it to a peer joke and not taking it seriously. In the case where students adopted this approach, the cyberbullying was restricted to an online environment with the aggressor having no direct connection to the victim. In Jacobs et al. (2015), when students were asked about online encounters they perceived as cyberbullying, most interpreted their cyberbullying experience with a previous experience of face-to-face bullying. In certain instances the respondents admitted that the cyberbullying experience was not as harmful when compared to the physical bullying they experienced (Hymel & Swearer, 2015; Hymel, Rocke-Henderson, & Bonanno, 2005). An insight into this interpretation is that the students in this study also admitted to retaliating back with cyberbullying if they perceive themselves as victims. Three coping strategies were employed by students. The first is *aggressive*, a strategy to respond in kind to cyberbullying. The second is the *passive tactic*, similar to Parris et al.'s (2012) sub-level *acceptance* strategy in the *reactive* strategy. In this case the victim adopts a nonchalant attitude and ignores the aggressor in the

hope that the abuse will cease if there is no confrontation (Jacobs et al., 2015). This kind of practice could be counterproductive if the aggressor persists with the online abuse and could lead to further harassment. The third strategy is *active coping*. Here, once a victim notices repeated abusive content from the same user, they take a proactive approach and block the aggressor's access to their profile and delete abusive content. Students also adopted this approach in standing up for someone else once they noticed cyberbullying. In a particular incident in the study, a student confronted the aggressor online by sending a direct message. Jacobs et al. (2015) highlighted that this strategy was effective in discontinuing cyberbullying once the aggressor becomes aware that other users have observed their abusive pattern and their identity is known. Pennington (2000) acknowledged that rarely is information we receive interpreted in a vacuum, especially about other people's behaviour. In interpreting this information, a process of association takes place where existing held beliefs and experiences are fed into this interpretation. It is important to note that the Parris et al. (2012) *reactive coping* strategy as well as the Jacobs et al. (2015) *aggressive* and *active coping* strategies also fall into Pennington's (2000) *analysis* of social cognitive processes. Since the process is a recursive one, the outcome of continuously analysing (re-interpreting) a response is that online users in these contexts can change their approach from *aggressive coping* to *active coping* as they deem appropriate.

Pennington's (2000) second process is *analysis/analysing*. In this stage, the initial interpretation is adjusted, altered, or even rejected. This change comes as a result of continued further association and interaction, and is a result of the undue influence of previous experiences. The *interpretation* is altered to accommodate the new experience and information. Ševčíková et al. (2012) highlight this in their study. For instance, in the scenario when the aggressor is unknown to the victim with no direct or indirect connection, the victim perceives

little or no threat. However in the event that the victim becomes aware that an unknown aggressor is capable of connecting a virtual threat with the real world, for example being able to ascertain the victims real life location (city, state or other online profiles), the perceived threat increases, albeit not as high as when the aggressor is fully connected to the victim. On the other hand, in Parris et al. (2012), students reported adopting a *preventive coping* approach after witnessing issues relating to privacy risk and cyberbullying of other students. In this case, the students could be said to have *analysed* previous situations and decided on adopting this approach. The *preventive coping* approach includes two levels. The first is *increased security awareness*, where students admitted to adhering to standard internet safety practices and social media etiquette. The second strategy is to *talk in person* face-to-face with the aggressor. This approach is usually carried out to clear up any misunderstanding of interaction online. Parris et al. (2012) explain that “the inability to detect tone and sarcasm [online] may lead a student to misinterpret a message and thus react in a hostile nature” (p. 295). In the *memory commitment* stage, Pennington (2000) concludes that new experience is stored in memory to be recalled and used for further information processing when an experience of similar social interaction occurs.

When cyberbullying occurs online, the victims experienced humiliation offline if other acquaintances or larger audiences are aware or become involved in the attack (Parris et al., 2012; Ševčíková et al., 2012). A notable observation Ševčíková et al. (2012) made is that in online environments, adolescents collectively appear to easily succumb to cyberbullying as evident from an excerpt from one of the participants who stated a friend made an offensive remark of a photo with her mother. Although made in light jest, other online friends quickly got involved with each trying to make a more sinister remark that others will find amusing. Ševčíková et al. (2012) summed this culture and found that “the Internet intensified the bullying in the sense that

classmates who had not before witnessed the bullying became part of the bullying owing to the easy spread of victimising materials” (p. 325). The third experience termed *no way to prevent cyberbullying*, highlighted in Parris et al. (2012) pointed out instances where students refused to engage with any process to address online abuse: the figure stood close to 50% or 9 out of 20 students. The students in this category gave reasons such as “the lack of consequences for the cyberbullying and perpetrator ability to remain anonymous” as well as ease with which banned aggressors “create new profiles and begin cyberbullying again” (p. 297). While the participants’ experiences are processing schemas deployed in their accounts, the wider contexts, external to their responses, were not fully explored. This could offer clear rational as to the reasons behind their choice to respond in certain ways that are not solely intrinsic.

2.4 Theoretical Perspective

The theoretical perspective employed for this study is framed by Actor-network-theory (ANT) clarified by Latour (2005) and optimal distinctive theory (ODT) developed by Brewer (1991). If we are to accept the notion that humans and technology are working in tandem and that this, in conjunction with a wider collective have an impact on the self, agency, and means of interaction, then ANT and ODT provide an adequate framework for exploring these notion within an empirical study. ANT provides an adequate perspective for exploring social association, interaction, or occurrence, and is aptly suited for handling complex, elusive, and messy sites (Law, 2004). A key principle of ANT is “that society, organizations, agents and machines are all *effects* generated in patterned networks of diverse (not simply human) materials”, that the social is composed of more than just people. Machines, animals, text, money, architectures, and that all these entities are interactive effects and mediate each other (Law, 1992, p. 380). On the other hand, to complement ANT, optimal distinctive theory (ODT) caters

exclusively to the human (intrinsic, external and collective) influence on social-representation, more specifically it provides the means to examine how individuals create their social self and the social context in which this self operates (Brewer, 1991). ANT is elaborated in Chapter 3 while ODT is explained below.

2.4.1 Optimal distinctive theory

Early conceptualisations of the self were highly individuated, with theories focusing on the internal structure while ignoring the connection to the external world. Optimal distinctive theory (ODT) addresses this inadequacy and accounts for motivational, situational, and collective determinants applied to the self (Brewer, 1991; Sherman et al., 1999). The casual awareness of the social world reveals both group and individuated identity in human relations, from nationality demonym to personal names. Nationality denotes association with a country but is distinct enough when compared to other countries. While someone may share the same last name with their siblings to indicate being a member of the same family, they also bear a first name to indicate their individuality from other family members. ODT is a model that provides the means of exploring how individuals develop social identification of the self and postulates that there exists an interplay and fundamental tension between two opposing social motives that influence self-representation: the need for inclusion which is “the desire to be part of, embedded in, or assimilated to larger social collectives” and the countervailing need for uniqueness, individuation, or differentiation of the self from others (Brewer, 1991, p. 477; Brewer & Roccas, 2001, p. 220). According to the tenets of ODT, all human beings have some desire for inclusion and some need for differentiation. The social self-representation is the process of stabilizing self-concept and reconciling these opposing needs with each motive holding the other in check.

ODT assumes that individuals address their need for social identity by maintaining some intermediate degree of similarity with others while holding on the intrinsic value of self. In this regard, enactment of self should not be seen as only an inherent or external construct but a compromise between assimilation and differentiation, where the need to depersonalise the self is achieved in-group and the need for differentiation is achieved through inter-group contrast. Consider a group of teenagers where they all adopt the appearance and behaviour typical of their cohort; however their appearance and behaviour is more noticeable when in contrast with adults (Brewer, 1991). ODT makes the distinction between personal identity, which is the individuated self “that differentiate one individual from others within a given social context”, and social (collective self) identity, which is the “categorisations of the self into more inclusive social units that *depersonalize* the self-concept, where *I* becomes *we*” where the perception of self is an interchangeable archetype of a social category (Brewer, 1991, p. 476)

2.4.1.1 The tenets of ODT

Brewer (1991) highlighted four key tenets that ODT. The first is that optimal distinctiveness is achieved when the conflict between the needs for differentiation of the self and assimilation with others is balanced; achieving this balance (homeostasis) is dependent on the degree of satisfaction of the two opposing needs, inclusion and differentiation (Sherman et al., 1999). The second tenet is that achieving optimal distinctiveness is independent of the implication of group membership or association, one of the implications of this tenet is that association with a negatively value group could have positive value for the individual “if such identification helped to restore homeostasis” (Sherman, Hamilton, & Lewis, 1999, p. 91). This is significant since the aim of ODT is *balancing* the opposing needs (achieving homeostasis). Since identification with a negatively value group restores the balance for the two opposing needs for

the individual, they prefer an optimal level of distinctiveness over positive self-identity (Brewer, Manzi, & Shaw, 1993; Sherman et al., 1999). Brewer (1991) nonetheless notes that positive group benefits are preferable. Thirdly, distinctiveness is always context-specific and based on the frame of reference in which the social identity is defined or discussed (Abrams, 1999; Brewer, 1991; Sherman et al., 1999). This tenet is based on the transitory, shifting, and malleable nature of the entities that impact the way social-representation is categorized. The self has to be situated in the context that enabled its enactment as there is no fixed form of social-identity. Sherman et al. (1999) noted that “the self cannot be considered a completely stable and static mental structure. Rather, the self is the outcome of a process of activation, categorization, and social judgement” (p. 92). This is due to the self being subject to momentary group association where once the association is terminated the collective self enacted to suit that categorization may also disappear (Vescio, Hewstone, Crisp, & Rubin, 1999). Latour (2005) went as far as stipulating that groups themselves are impermanent, as only the process of group formation is constant. The implication trickles down to any resulting enactment from this group. Additionally other motivations can alter the peak point for the need of uniqueness or inclusiveness, and in a given social state one might supersede the other and affect how the self is categorized. This brings us to the fourth and last tenet, which states that the point of distinctiveness or inclusiveness is based on the strength of the opposing drives or need where “the relative strength of the two needs is determined by cultural norms, individual socialization and recent experience” (Brewer, 1991, p. 478). In this case, a user with a stronger sense for *deindividuation* and a weak need for distinctiveness would have a low optimal point. Achieving optimal balance on the spectrum is based on the individual or the group norm and might require more commitment from the

individual for in-group aligned assimilation regardless of their socialization preference. In this case the individual can either give in or abandon the group all together.

2.4.1.2 The deindividuation of the self

In social context, being highly distinct or individuated leads to the vulnerability of isolation and stigmatization (Brewer, 1991). This may hold a reason as to why humans are uncomfortable in being distant and subconsciously seek in-group association. The need for inclusiveness holds that personal identity alone does not provide the optimal level for self-definition in social context. Brewer (1991) notes that the *prepotent self* is comprised of “a collective identity at some intermediate level of inclusiveness, one that provides both shared identity with an in-group and differentiation from distinct out-groups” (p. 478). When in social context individuals attempt to establish or find similarity or shared values with others, and when this is absent, Brewer (1991) noted that “too much personal distinctiveness should leave the individual seeking inclusion in a larger collective” (Brewer, 1991, p. 478). The need for inclusion translates to the extended self for that specific social space (E. Smith, 1999) and the greater the degree or level of assimilation the more depersonalised the self becomes as “through this depersonalization process, the importance of the individual’s *personal* identity is diminished, and the importance of the person’s *social* identity is increased” (Sherman et al., 1999, p. 88). This is not to say that the individual does not recognize their personal identity but rather that their self characteristic is in line with the attributes of the group. Sherman et al. (1999) noted that this process aids the individual in gaining self-understanding of their own attributes.

A notable observation of ODT regarding the need for inclusiveness is that when placed in social dilemma or faced with conflict, the individual responds in terms of group identity. They tend to take the characteristic position of the group or see things from the perspective of the

group and aid in preserving the collective and in such instance, “the collective self dominates the individuated self” (Brewer, 1991, p. 479). For example, Brewer and Roccas (2001) reported results from their study that participants who shared collective value orientation reported the highest mean level of identification with other participants that were on the same major. Sherman et al. (1999) reported on findings that group members who strongly identified with a group (high inclusiveness level) reacted more intensely when the group was threatened by increasing their degree of solidarity and association with the group but this was not the case with group members that had high distinctiveness level or value within the group (p. 103). One of the reasons for this is that group association comes with *social identity value* that includes benefits that holds the group together. One of those benefits is that “self-understanding is achieved through adopting group characteristics through self-categorization” (Sherman et al., 1999, p. 91) or by balancing their competing needs for social acceptance and distinctiveness they come themselves in social context. However the need for inclusiveness or *deindividuation* does not mean that the need for distinctiveness is not present, but rather the need for assimilation to a distinct in-group exists (Brewer, 1991).

2.4.1.3 Achieving distinctiveness

The need for differentiation is warranted when the individual seeks to highlight more of the personal self than the social self in self-representation. This is activated once individuals find themselves in a more inclusive social unit; the need for inclusiveness decreases while the need for differentiation increases (Brewer et al., 1993; Brewer & Roccas, 2001). While humans may feel uncomfortable being too distinct in social context, the same applies while being *undistinctive*; hence “in a situation that casts a person as an anonymous member of a very large group, the individual feels the need to differentiate him or herself from others and to emphasize

his or her own unique properties” (Sherman, Hamilton, & Lewis, 1999, p. 89). Brewer (1991) noted that “[association] with groups that are too large or inclusive should leave residual motivation for greater differentiation of the self from that group identity”, as groups that are too inclusive lose the loyalty of members or break up into splinter groups (Brewer, 1991, p. 478). The need for distinctiveness is the independent status attached to group membership. Brewer (1991) points out that this is important to secure the loyalty of group members where the “group must not only satisfy members’ needs for affiliation and belonging within the group, they must also maintain clear boundaries that differentiate them from other groups” (p. 478). Group association must offer unique traits to make its members feel unique to out-group members, which Latour (2005) describes as the *anti-group*, noting that “it is always by comparison with other competing ties that any tie is emphasized. So for every group to be defined, a list of anti-groups is set up as well” (p.32). In-group uniqueness is not only more pronounced in comparison to external groups, it could also be that it is geared to counter those of external groups.

2.4.1.4 Activating optimal equilibrium

Achieving optimal equilibrium is complex since a number of factors come into play. It depends on the individual, the social context, the social group in question, and the commitment required from the individual for identifying as part of a social group. However, it is achieved once the individual has personally come to terms with the competing needs and trade-offs required for self-representation. Brewer (1991) referred to this as the point of equilibrium:

In the model, equilibrium, or optimal distinctiveness, is achieved through identification with categories at the level of inclusiveness where the degrees of activation of the need for differentiation and of the need for assimilation are exactly equal. (Brewer, 1991, p. 478)

For individuals that are prone to differentiation, optimal distinctiveness occurs at a relative higher level while individuals with high level for assimilation but low levels for individuation have a low optimal activation point. While this is the general notion for achieving optimal activation point, other factors come into play. For example, when individuals become immersed in a larger and more inclusive social unit where uniformity is the norm, regardless of their personal penchant for distinctiveness or inclusiveness, such spaces decrease their need for inclusion and activate the motive for differentiation with an opposite outcome where the individuals find themselves disconnected from the collective. Brewer and Roccas (2001) noted that the “resultant counterpressures lead the individual toward an equilibrium point where the sense of self is extended to collectives that are sufficiently inclusive and sufficiently exclusive to satisfy both needs simultaneously” (Brewer & Roccas, 2001, p. 220).

The extent to which the collective self is enacted to suit in-group norms is reliant on the relative importance placed on the values of independence (autonomy) versus interdependence in relation to the self and others. In other words, while the group provides inter-group distinctiveness it must also accommodate intra-group distinctiveness among group members. Brewer and Roccas (2001) referenced this as the relational self, pointing out that ODT must cater to this as well as the individual self and collective self. Brewer (1991) suggests that given the individual and collective self and their opposing motives, the relational self is the need to achieve optimal distinctiveness in-group. The relational self at the point of distinctiveness requires autonomy for the individual in-group, wanting deindividuation in-group while being part of the group, and at the point of inclusiveness requires intimacy and interdependence in-group (Brewer & Roccas, 2001).

2.5 Conclusion of Literature Review

Agency and the resulting performance of self or identity in virtual environments are complex and go beyond simple delineations since it becomes multifarious (Emirbayer & Mische, 1998; Luke, 2002; van Dijck, 2009). The consequential state is one that implies the fusion of both human and nonhuman activities, where the context and nature of the technology platform impact the enactment of self by sharing and transferring power to users. Social interactions are complex encounters and this is more so when experienced online and in virtual environments. This phenomenon is the co-regulated coupling of multiple autonomous agents, with capabilities to mutually affect each other. The contemporary age of social media has posed a novel dimension for exploring and examining interactivity. The traditional explication and theorization of interactivity is accepted, but with a new explication that accommodates interactivity between two or more dissimilar entities that are part of a system that transcends the association and physical infrastructure network, and one that resides mentally among the agents as a *perception*. Interactivity goes beyond a technology medium or platform and cuts across perception and process, which should all be considered when exploring interactivity. There is a need for social cognition to be examined beyond the perspective of self-perception and dispositional narrative, as external factors also play into these concepts. Cognition has also been situated as interactive or collaborative, distributed across humans, mediated through ingroup culture, nature, and technology or where boundaries of intrinsic perception dissolve. In this space (social media environment), social cognition emerges as a result of complex webs of experiences, where both collective knowledge and individual understanding merge (Petrina, 2000). This results as individual understanding or perception of others in online interaction. It involves verbal and nonverbal behaviours with varying context, users, and settings (De Jaegher et al., 2010). The

studies reviewed in this section provided insight into how social cognition has been utilized in understanding how children interact online and address instances of antisocial behaviour. This review also highlights teenagers' awareness and strategies they employ to self-manage their activities online. In this scenario, teens' concept of online space and their perception of the trailing consequences offline are highlighted. For example, in Ševčíková et al. (2012), students perceived cyberbullying as less bothersome within the confines of online spaces but they perceive a threat when transferred into the real world.

This chapter extensively covered the key concepts related to this research and examined them within the context of social media and raised the questions on aspects that need answers. The chapter delineated what could aid in understanding not only teenagers' enactment of self, but also mode of interaction and provide insight into ways of examining online antisocial behaviour. Finally this chapter also provided an analysis of ODT, which along with ANT is used to guide the discussion and presentation of the findings. The next chapter clarifies the framework of ANT and outlines the methodology and techniques used in the research.

Chapter 3: Methodology and Research Design

The research questions and literature review informed the methodology and research design. The first two sections of this chapter detail the methodology and research methods employed and the approach utilized for the interviews. The third section describes the research site, approach taken in recruiting the research participants and a brief description of the participants. The fourth section details the focus group sessions, the procedure of the sessions, and the context of discussion. The fifth lists the data collection measure and sources while sections six and seven detail means employed in the analysis of the data and the ethical consideration assumed for the research. The final section elaborates ANT and the theoretical framework, which framed the methodological approach overall.

3.1 Methodology

A qualitative research methodology was employed for this study; Hoepfl (1997) highlighted the call for qualitative methods in research within areas that intersect technology, society, and education, indicating that it provides a means of probing and gaining deeper understanding of the social world in context-specific settings and accounts. This research is aimed at producing a rich description of the participants, their perceptions, and understanding of their (online) social world. Qualitative method generally “seeks to understand the social world through other people’s interpretations of it” (Bryman, Bell, & Teevan, 2012, p. 133), where the knowledge gained maybe difficult to convey solely through quantitative means (Hoepfl, 1997; Trifonas, 1995). It provides a means of gaining new perspectives in more in-depth detail by examining an occurrence through multiple (socially and culturally constructed) perspectives (Thorne, 2000). Qualitative method becomes the medium suited to describe, interpret, and report the findings in a form in which it is experienced. Hoepfl (1997) suggested that a qualitative

method is best suited as the initial step in investigating a lived or experienced phenomenon, stating that it presents a method of “identifying the variables that might later be tested quantitatively” (p. 49). This research examined how online social spaces have reconfigured interaction, the resulting impact on how the participants understand their social media environment, and how this in turn shapes the production of the digital self and the manner they use it for socialization. In addressing these points of enquiries, qualitative method provides a means of not only understanding the behaviour of the participants and the specific environment in which the participants operates but also, external factors and context are considered in recording occurrences of the social world (Bryman et al., 2012). The human participants were vital to the data collection, encompassing descriptive and expressive languages and the distinct presence of *voice* in the text (Hoepfl, 1997; Thorne, 2000). In view of these attributes, employing a qualitative approach highlights the participants’ *voices* as a central part of the research findings as human experience is often shaped, shared, transformed, and understood through linguistic representation (Thorne, 2000, p. 69). Analysis in qualitative research seeks to interpret findings and give meanings in context, which provides additional data that enable the research audience to better understand the results and provides future researchers detailed information and situational factors that led to the interpretation of findings.

3.2 Research Methods

The main method used in this research for data collection was a focus group interview. At the initial stage of this study, one-on-one interviews were considered, however the decision to utilize a focus group was in light of gaining a collective understanding from the group of participants as teenagers. The use of a focus group set allowed the participants to not only express their own perspective but also listen to others, contribute to their responses, and engage

as a collective (Bryman et al., 2012). The focus group sessions entailed one unstructured interview session and three semi-structured interview sessions; the semi structured interview entailed the use of vignettes as a cognitive scaffold in student-centred inquiry (Calder, 2015; Molenaar, van Boxtel, & Sleegers, 2011). Scaffolding was a measure to guide and stimulate conversation among the participants.

3.2.1 Focus group

Focus group interview is one of the most widely used methods in qualitative research, including unstructured and semi-structured interviews (Bryman et al., 2012; DiCicco-Bloom & Crabtree, 2006; Hoepfl, 1997; Owen, 2001). Its adoption was due to its flexibility, effectiveness in capturing a wider perspective, and it being minimally intrusive in comparison to other ethnographic techniques (Barbour, 2005). Discussing the participants' use of social media is one of a personal nature, especially if the researcher is someone who the participants may view as a stranger. A key benefit of the focus group interview was that while it allowed me to ascertain personal perspectives from the participants, it also accommodated a wider range of experiences in a space where the participants felt comfortable among their peers (DiCicco-Bloom & Crabtree, 2006, p. 315). It provided a conducive and stimulating environment for the participants to share their thoughts as teenagers without the feeling of being judged, especially with teenagers as a vulnerable group (Owen, 2001). Focus group interviews are optimal for exploring personal experience, viewpoints, and life history from a collective, where the participant *voice* is present in context with others (Barbour, 2005; Owen, 2001). It can entail an open-ended process that allows researchers the freedom to modify the research questions as the investigation progresses when new information is obtained about both the participants and research questions (DiCicco-Bloom & Crabtree, 2006). For example, in Rector-Aranda and Raider-Roth's (2015) study into

students expressing their *voice* in an online and classroom-based role-playing exercise, through the use of a focus group interview method, they were able to uncover the different modes in which students express themselves (through *own voice* and *character voice*). This enabled them to subsequently adapt the research process to fully explore both expressions of *voice*. Interviews involves a “process designed to bring out how the *interviewees themselves* interpret and make sense of issues and events” (Bryman et al., 2012, p. 166). In this research, employing an interview method helped highlight how students understood their enactment of agency and online identity within their online social spaces; this presented an avenue for further probing their responses and a rationale behind those responses.

3.2.2 Cognitive scaffolding with vignettes

As part of the focus group interview, vignettes were employed to stimulate discussion and act as scaffolding during the focus group interview. Scaffolding has typically been used with student-led learning activities as an adaptive, transitory, or temporary support that allowed students to independently gain or develop understanding of key concepts related to the learning activity. Barbour (2005) noted the use of vignettes in focus group interviews to stimulate conversation, the manner in which it was used for this study, is as a purposeful cognitive scaffold for student-centred inquiry. The aim was enabling the participants to articulate their perspective, understand the concepts, and cognitively engage with the area of enquiry (Calder, 2015; Molenaar et al., 2011). The vignettes were developed to mirror aspects of agency and identity, mode of interactivity, and instances of online antisocial behaviour. The vignettes were posed as a problematizing mechanism (Molenaar et al., 2011), where the participants were presented with a scenario followed by a guided discussion as well as trigger questions (exploring the perspectives of the characters in the vignettes) to ignite thinking, dialogue, and discussion among participants.

Vignettes are short scenarios based on real or fictional events or stories. In this study, participants were invited to respond to the events in the vignettes based on the characters depicted within (Bloor & Wood, 2006; O'Dell, Crafter, de Abreu, & Cline, 2012). Vignettes aided the participants in visualizing the actual event and responding to questions drawing from their own experience while providing distance (especially when investigating sensitive topics) without feeling personally exposed or vulnerable to the researcher or other participants versus if the questions were asked in a direct manner (Bloor & Wood, 2006; Brondani, MacEntee, Bryant, & O'Neill, 2008; Jenkins, Bloor, Fischer, Berney, & Neale, 2010). O'Dell et al. (2012) employed vignettes in a focus group interview with 15-18 year old students who identified as young carers, language brokers, or young people who engaged in work associated with teenagers (part-time weekend jobs), to investigate the similarities of their experience with the ones depicted in the vignettes. Smith, Morgan, and Monks (2016) employed the use of vignettes to explore students' perception and psychological responses of social media ostracism (experienced in cyberbullying) and inclusion. Other studies have employed vignettes to explore youth mental health (Klineberg, Biddle, Donovan, & Gunnell, 2011; Monks et al., 2015). Klineberg et al. (2011) used vignettes to explore how 16-24 year olds recognised severe depressive symptoms, and how they thought a young person might respond to these symptoms. Monks et al. (2015) utilized vignettes to investigate how 13-14 year olds perceive social media as a research tool for examining issues of adolescent mental health and wellbeing.

Vignettes provided an insight into the interpretive process and multi-faceted nature of the experiences of the participants (Jenkins et al., 2010) and were introduced in the later part of the semi-structured interview process. The purpose of the vignettes were clarified to the participants: the purpose was not to capture the accuracy of the participant's response but to enable them

articulate their opinions, drawn from their own experiences (Brondani et al., 2008), and gain an insight into the social components of their interpretive perceptual framework or processes guiding their response (Jenkins et al., 2010, p. 178). While the plausibility of the vignettes was vital to eliciting responses, and ensuring that the participants could relate (O'Dell et al., 2012), it also served as a juncture to gain their perspective of events if they did not find it plausible. Jenkins et al. (2010) noted that the role of the researcher is not to eradicate implausibility but to adequately prepare the research participants to unreservedly respond to the exercise and that their responses may vary from one another or how the scenario unfolds. Researchers can capitalize on the inadequacies of vignettes and adopt the following:

The lack of detail in vignettes that are given to participants means that they are led to fill in the gaps that may reveal important data for the research project. Thus, the participants' interpretation of the vignette material becomes valuable material for study rather than a weakness in the design of the research instrument. (O'Dell et al., 2012, p. 704)

For example, when a participant could not respond because they did not believe the incident would play out in the prescribed manner, they interjected and projected from their own experience into the characters and scenario, and stated how the incident depicted might play out. Others participants contributed and this further endeared the original purpose of the vignette. The manner in which the participants made sense of the incident depicted in the vignettes are not entirely different from how they make sense of everyday situations. Jenkins et al. (2010) noted that that participants' "response to a vignette may well carry the same predictive power in respect of how they would behave if they were to be subsequently presented with a similar, 'real-life' event" (p. 192). In analysing the responses from the vignette, close attention was paid to when the participants shifted between discussing the vignettes as themselves and from the perspective of the character or group (O'Dell et al., 2012; Rector-Aranda & Raider-Roth, 2015).

3.3 Recruitment of Participants and Selection of Research Site

The research employed purposeful sampling in selecting participants; the intended targeted audience for the study were teenagers between 14-19 years who are active within online social media and virtual environments. A key reason for highlighting this group as the targeted audience is as a result of empirical studies that identified this age group as having the highest rate of active social media use and online presence (O’Keeffe & Clarke-Pearson, 2011; Strom & Strom, 2012). In addition, earlier studies also identified this cohort as having a higher chance of being impacted by online harassment or being victims of cyberbullying (Ševčíková et al., 2012). Prior to recruiting participants I sought access to the site by initially approaching the Principal and staff members of the school to find out if they would be willing to participate. A formal request for research participation was eventually made to the school and approval was received. The sampling frame used for selecting participants for the research was that participants must have an active presence in any online social media or gaming platform. DiCicco-Bloom and Crabtree (2006) recommended that “the sample of interviewees be fairly homogenous and share critical similarities related to the research question” (p. 317). Quota sample selection was based solely on the convenience of readily available and willing participants who wanted to partake in the research. A conscious attempt was initially made to maximise the depth of the sample participants as much as possible, by selecting across age range and gender; however, a quota sample to satisfy representing participants based on race, age, and gender was not done as it was minimal to the research objective.

3.3.1 The research site

The research site is an independent Grades 8 to 12 high school located in the downtown area of a city in the Lower Mainland of British Columbia, Canada. The principal indicated his

willingness for his students to participate in the research. A formal meeting was arranged between me, the research Supervisor, and the school's Principal for briefing the nature and purpose of the research. Prior to conducting the recruitment drive a formal presentation of the research was made to the school's administrative and teaching staff. This was done to enlighten them about what the research entailed and solicit their assistance for recruitment of participants. The teachers were enthusiastic about the study and were helpful in advertising and recruiting students from their respective classes. A flyer was handed out to the teachers through the school Principal to advertise for participants. Following the recruitment drive from the teachers, 12 students initially indicated interest in participating in the research and a brief meeting was arranged to meet with the students. Following the meeting it was agreed, in consultation with the principal, that Wednesday afternoons after classes were a convenient time to carry out the interviews. Three of the initial twelve students that showed interest pulled out of the data collection prior to its commencement, two of which had other after-school commitments on Wednesdays, and one did not return the consent form and was not included in the study. The remaining students committed to participating in the study and duly had their parents or guardian sign the consent forms.

3.3.2 The participants

The participants for this research study comprised of nine students; four males and five females aged between 16-21 years of age, all high school students within Grades 10 to 12 (Table 1, age and Grade distribution). The participants were made of a convenient sample and all participants volunteered to partake in the research. At the beginning, once the consent forms were signed, the participants chose their pseudonyms and this has been used in the discussion of

the findings of the research. One of the participants pulled out the study after the first two sessions and cited personal reasons.

Table 1: Age and Grade Distribution of the Participants

Female										Male							
Age	14	15	16	17	18	19	20	21		14	15	16	17	18	19	20	21
Number of participants	0	0	1	2	1	0	0	1		0	0	1	1	2	0	0	0
Grades			12	11	12			12				12	11	10/12			

Da, a female international student, was 16 years old and in Grade 12 at the time of the research. She described herself as an intense social media user and admitted to have previously stopped using social media because she spent too much time on it, stating that her parents stopped her from using it when she constantly got into conflict with other users. As a result of this she mentioned she felt less connected with her friends and resumed using social media. She volunteered to participate in the study after a discussion with one her teachers.

Din, a male international student, was 16 years old in Grade 12. Din has an active presence across different social media platforms, and admitted spending more than 10 hours a day on social media; he described his use of social media as enabling him to stay in touch with friends and to become aware of current events. Din decided to participate in this study after Da suggested it to him, and informed him that she would also be participating in the research study.

Nick, a male student, was 18 years old and in Grade 12. Nick is the only participant that identified as an avid gamer and spends more over 5 plus hours a day playing online games, typically MMORPG. Nick described his use of social media as the easiest means of

communicating with friends and feels more comfortable expressing himself and interacting through this medium. Nick volunteered for the study after having a discussion with one of his teachers at the school and noted that he was curious to find out about participating in a university research.

Bambi, a female, was 21 years of age and an international student from South America, described her use of social media as addictive. Bambi said she felt less connected without social media and she spends too much time on it, which previously informed her decision to stop using social media, however she has since resumed her use. Bambi pulled out of the study after the first two focus group sessions. She was coy about the reason but alluded that she felt a bit out of place. Bambi was the oldest participant in the study.

Owen, a male, was 18 years old, in grade 10, and an international student. Owen described himself as a moderate gamer but a heavy user of (non-gaming) social media apps, and he believes his social life is better due to his use of social media. Owen volunteered to participate in the study because he believes it will be good for his resume.

Sebastian, a male, was 17 years old and in grade 11. He described himself as an avid social media app user and said he uses it to maintain existing friendships as well as establish new ones. Sebastian decided to participate in the study because he plans to attend UBC (due to encouragement from his parents). He decided to participate in the study to get an experience into how a research study is conducted. He mentioned he had previously attended other UBC led events aimed at teenagers.

Ki, a female, was 18 years old and in grade 12. She described her social media use as moderate in comparison to her friends; Ki mentioned this is due to her parents providing oversight into her social media use and her studies. Social media for her is the only means she

uses to contact her friends. Ki volunteered for the study on recommendation of the school's Principal

Kelly, a female, was 17 years old in grade 11; she also described her social media use as being addictive and she mentioned that she spends most of her day checking her social media. Kelly could not attend the last session as it conflicted with her piano lessons. She decided to volunteer for the study after one of her teachers suggested it to her.

Wendy, a female, was 17 years old and in grade 11 and believes you can get a good idea of her personality from her social media profile. Wendy indicated that through her use of social media, she got to know her fellow students better. Wendy decided to volunteer for the study because her best friend Kelly recommended it to her.

3.4 Research Procedures

The Principal supplied a list of potential students who were willing to participate in the research after which an informal meeting was scheduled with the selected group. In this meeting the purpose, nature, and aim of the research was conveyed to the students and they were informed of that their participation was voluntary and they could at any point withdraw from the study if they chose. The students were provided an opportunity to ask questions regarding the research and about their involvement. The potential participants were then given the consent forms for their parents or guardians to sign and return before commencement of the study.

The Principal allocated the art studio for use for the interview session; this was the venue for the first session, however the subsequent sessions were moved to one of the vacant classrooms since it was more spacious with more lighting and an overhead projector and SMART board for group exercises and activity. Wednesday afternoons after classes were ideal for the students as this is typically a short teaching day and classes are concluded earlier than a

normal teaching weekday. The focus group interview was scheduled into four main sessions to run weekly every Wednesday for a month, additional information for clarification of responses was sought from the students by email correspondence during the period of study, however this was kept to a minimal and consent was clarified after each focus group session.

3.4.1 Interview sessions

The focus group interview was divided up into four sessions and it consisted of one unstructured focus group interview session and three semi-structured focus group interview sessions. The unstructured focus group interview phase entailed an open-ended, informal, and conversational interview, with exploratory questions. I utilized mostly memory aids and a small set of written questions to examine the research topic. The set up for this interview enabled the interviewees to respond freely to questions and I explored the responses that were worthy of a follow-up (Bryman et al., 2012). The next three sessions, which were semi-structured focus group interviews, a formalized script was followed and the personal pin-up recorders were introduced as the participants became more relaxed and familiar with me and research topic. These sessions entailed data collection and exploration of a pre-determined area of inquiry (DiCicco-Bloom & Crabtree, 2006; Hoepfl, 1997). In these phases, aspects of the participants' response highlighted in the unstructured interview and concerns not initially accounted for were addressed as further explanations were given and new findings were also explored. In this regard, Hoepfl (1997) asserted that "in keeping with the flexible nature of qualitative research designs, interview guides can be modified over time to focus attention on areas of particular importance, or to exclude questions the research has found to be unproductive for the goal of the research" (p. 52).

3.4.1.1 First session – Building rapport

The first interview session was designed to build rapport with the participants and among the participants as a unit, where they all felt comfortable in expressing themselves. DiCicco-Bloom and Crabtree (2006) referred to this as guided conversation; it was employed as a means of building or gaining confidence of the participants and establishing rapport. Prior to the interview I restated the purpose and aim of the research. In each interview session I reminded them of their rights as participants in the research and that the responses given during the interview were confidential.

Guided exploratory questions were written down on a small notepad and the responses from the session were taken down by hand written notes and through a handheld audio recorder kept by my side. Bryman et al. (2012) suggested that in such instances, “using even the most rudimentary interview guide hinders genuine access to the worldviews of members of a social setting” (p. 166). In this phase the personal pin-up recording devices were not introduced as it would be viewed as overly invasive for the first meeting. The questions revolved around the type of social media platforms they currently use, how they found out about the platform, and their reasons for using the platform. This session served as a means to understand how the participants as teenagers understand their use of these platforms, how they view them as central and important to their lives as teenagers. In this session I played the role of moderator and facilitator and attempted to minimize the hierarchical power relationship that the participants might feel of myself as an authority figure or teacher (Owen, 2001). At the end of the session the participants were thanked for their participation and given a journal to prompt questions and for their composition notes.

3.4.1.2 Second session – Exploring online identity

In the second session the focus was on the concept of online identity. The discussion and questions explored the various ways and means in which the teenagers expressed aspects of their identity online and the motivation behind those expressions. The session also explored how they perceive and understand how other people expressed their identity online.

The group activity and exercise (Appendix D) for this session prompted the participants to write down on a flipchart the various social media platforms they currently use. The next task was to note down aspect of identity and online activities on the same chart and associate each aspect of the listed identity and online activities with the social media platforms. This exercise provided the participants with a visual aid of how they represented themselves online and it served as the focal point for the discussion of their online self and the process for enacting this self.

3.4.1.3 Third session – Modes of interactivity

The third session examined the mode and context of how the participants interacted online across the wide array of social media platforms they currently use. The focus of the session was to uncover the daily social media habits of the participants. They spent the session each describing what a typical day was like for them, what a good day of social media looked like, the amount of hours spent on social media, and the particular social media platforms they spent the most time on. The next part of the session focussed specifically on the nature and context of their social interaction. For example, if a participant noted that they spent two hours on Facebook, they would describe the type of activity they spent during those hours, and how they view their online interaction as either being the same or different from their interaction in the physical world.

3.4.1.3 Fourth session – Cyberbullying and online antisocial behaviour

The fourth session served as the closing interview and ran slightly over the stipulated time limit. Some of the participants wanted to clarify or respond to some of the questions and topics covered in the previous interview sessions. They were given ample time to engage and respond. This session relied heavily on the use of the vignettes (Appendices E and F) developed specifically for the session and focused heavily on key digital issues such as cyberbullying, expressions of hate, and inappropriate online behaviour. Given the nature and sensitivity of the topic, it was important not to put the participants in a vulnerable position. The questions and discussions were specifically related to the vignettes that were drawn based on specific cases across reported experiences of cyberbullying or antisocial behaviour that has made the mainstream news media. I created the vignettes in consultation with the Supervisor while the case study was adopted from MediaSmarts, Canada.

3.5 Data Source and Collection

Data from multiple sources were used but the main source was the audio recordings from the focus group interview sessions. Secondary sources of data included fieldnotes, participants' composition notebooks, and resulting participant artefacts from group activities and exercises during the focus group sessions. The data source and means of data collection are discussed in the following subsections.

3.5.1 Audio recordings

The audio recordings formed the main source of data and were from the focus group sessions. These were typically the participants responding to direct questions and discussions among the participants. For each of the three semi-structured focus group sessions, the

participants were given a personal pin-up audio recorder to use and prior to the focus group interview session; each participant was given personal instructions on how to use the audio recorder. Each recorder was then colour-coded and labelled with the pseudonym of each participant to aid in indentifying their audio recorder during the transcribing process. The audio files were transferred into a secure hard-drive and transcribed into text format for data analysis; the transcribed data were also stored in the secure hard-drive as well.

3.5.2 Fieldnotes

Fieldnotes were used throughout the research study. First, notes were used to record descriptive accounts and observations of the focus group interview sessions, one-on-one interaction with the participants where they responded to questions before the focus group session commences. Notes were taken on the participants in attendance, date and time, and the occurrence in the interview sessions that could not be captured by the audio (e.g., the participants' disposition and interactions among themselves during the session and observations from the exercises and group activities). *Everything is data* once the research commences (Latour, 2005). The second purpose of the fieldnotes was to serve as a reflective journal of the study. The reflective note taking was also done in two phases. The first was immediately after the interview sessions, where I made a quick summary note on points that stood out in the session. This ranged from aspects of the sessions that worked out well, points from the interview sessions that needed further clarification from the participants, or points that I hoped to later explore or revisit. The second phase was much later, away from the site, where I wrote down my reflection on the progress of the study *ad libitum* (Latour, 2005), where emerging findings, drafts, proposed points for analysis and thinking processes of the transcribed audio and participants artefact were noted down. This formed the basis for the formulation of my thoughts,

themes, findings, and conclusions. After each session, the field notes were analysed together with the transcribed audio and studied; reflective notes were then generated. The fieldnotes were usually recorded with a pen and paper when in the session with the participants, as using a laptop and typing might have been too distracting to the participants or give the impression that I was not paying attention to the interaction; the reflective notes were recorded electronically on a laptop.

3.5.3 Participants composition notebooks

At the beginning of the study, each participant was given a 120-page wide ruled composition notebook to serve as a correspondence journal for the study. The composition notebook served as a communication tool for the participants and was confidential between myself and each participant. The composition notebook served as a means for the participants to respond to question that required further clarity, for example once the audio from the focus group sessions was transcribed and tentatively analyzed, if further clarification to responses was needed, an email is sent to the participant with the questions to write down their responses on the composition notebook. The participants also used the composition notebook to respond to open-ended questions about the vignettes or respond to questions that they did not feel comfortable discussing within the group. The notebooks were submitted during the final session and the data from the composition notebooks served as a means of triangulation during data analysis.

3.5.4 Participant artefacts

The utilization of participant artefacts varied the form of data collected for the study. The focus group session included group activities and exercises that produced artefacts, like handwritten documents and visual materials. These group exercises and activities contributed to

an effective focus group interview discussion. For example, one of the group activities was to write down on a flipchart what they considered to be an online antisocial behaviour and exchange their flipchart with another group; the task was for each group to associate a social media platform with the listed antisocial behaviours from the other group. This exercise enabled the participants discuss how they each view their online social spaces differently. These visual materials and handwritten documents were collected and analyzed in correlation to findings from the transcribed audio recording. This process also served as a means for data triangulation.

3.6 Data Analysis

The transcribed audio from the focus group interviews and the fieldnotes were edited and served as the main data for the coding process (Bryman et al., 2012). A computer-assisted qualitative data analysis application, QDA Miner, was used for aggregating and coding the data. The use of this type of software allowed for greater manipulation, range and easy analysis (Dohan & Sánchez-Jankowski, 1998; Pearce, Arnold, Phillips, & Dwan, 2010). The data analysis was carried out through grounded theory approach, which is an effective approach in analysing qualitative data (Bryman et al., 2012). This provided a means of adequately analysing the data since interview data are often socially, technically, theoretically, and culturally laden (Haw & Hadfield, 2011; Throne, 2000), in the manner in which it is spoken. The data coding and analysis derived the concepts, categories, hypothesis, and theory (Bryman et al., 2012). Connections were then made between concepts, categories, and how they relate to the research questions. This approach places emphasis on deriving theoretical concepts from the collected data and it encompasses a recursive approach in which the data collection and analysis are carried out simultaneously, with the findings from both processes repeatedly referring back to each other (Bryman et al., 2012). After each focus group session, the audio and fieldnotes were transcribed.

The raw data were entered into the QDA Miner application for analysis. This process entailed highlighting small parts of the data and coding them by assigning labels and themes. In this phase, an open coding process was employed, where the coding process was provisional as this changed in light of new data and direction of the focus of enquiry. Once the themes were established, the reflective notes and much later the participants' composition notebooks and artefacts were examined in light of the established codes and themes for data triangulation. Bryman et al. (2012) asserted that open coding "stays very close to the data and yields concepts that are later grouped together to form categories" (p. 259). Key questions that aided the data coding and categorization are: what is this datum about or does it represent? What question does this datum pose? What answer does this datum provide to the research question and what are the implications? These were the guiding principles during the coding process (Bryman et al., 2012). The recursive nature ensured that new data were examined in light of existing data and themes. When the emerging themes have been grounded through data triangulation, and *theoretical saturation* has been achieved, that is the point where no new information emerges from both new and old data and when they offer no further illuminating or novel findings (Bryman et al., 2012). The final codes were examined in perspective of the theoretical framework (ANT and ODT), where further analysis and arguments were developed to stand and become the research findings.

3.7 Ethical Considerations

It was important to be clear about the intentions and description of the aims of the research. As a researcher, I was seeking access into participants' lives, understandings, and perceptions (Hoepfl, 1997). In any research of this nature "the first priority of a social research should be to ensure that the people being studied are not harmed by their participation" (Bryman et al., 2012, p. 193), DiCicco-Bloom and Crabtree (2006) maintained that interviewee anonymity

should be the first assumption unless otherwise stated. This research was approved by the University of British Columbia Behavioural Research Ethics Board. As indicated, prior to the research each participant under the age of 18 years was provided with a parent or guardian consent form (Appendix A). Verbal consent was also obtained from the participants for their participation prior to the start of the study. Throughout the study, free, informed, and continuous consent was sought from the participants. They were informed of their rights as participants at every interview session before the commencement.

The remaining sections clarify the theoretical framework (ANT and ODT) used in data collection and analysis. The chapter concludes with a clarification of ANT as related to the epistemological approach taken.

3.8. Actor-Network Theory, Optimal Distinctive Theory, and Social Media

ANT provides researchers a way to account for nonhuman entities as actors and this provision helps in situating the context of the social phenomenon in view, where the complexity of the social web can adequately be depicted. ANT involves “*recording* not filtering out, *describing* not disciplining, these are the Laws and the Prophets” (Latour, 2005, p. 55).

Similarly, ANT allows the listed actors the leeway to not only define themselves but make their own connection, and through their accounts, participants can explain how the affordance of their platform details their use, association, and enactment of self. Contemporary scholarly and peer-reviewed empirical studies into the application of ODT in examining aspects of human intersections with technology, more specifically social media, are virtually non-existent.

However ODT provides an apt perspective for examining social cognition and social media.

Notably, since social media users interact in a mediated environment where an online identity is needed for social-representation, ODT helps examine how collective group culture and norms

shape and influence the enactment and deployment of online identity. ODT accounts for the negotiation of self to suit intrinsic needs for agency and that of the collective.

3.8.1 Actor-network theory

ANT relies on a diverse set of actors (humans and nonhumans) to generate accounts and does not attempt to proffer a solution to stabilize the social world. Its role is to trace connections and provide descriptions of what is already *assembled*, in the process of *becoming* or held together by *connectors* (Latour, 1999, 2005). In the event that one postulates that the social is made up wholly of humans, firstly, to interact among themselves, nonhuman or abstract human entities would have to come into play. For example voice, sign language, a telephone, or letter; if they were to be eliminated from the social, then the network (of humans) simply disappears. The conclusion is that objects as well as humans make up the social world. After all, what is an orchestra without their instrument, a software engineer without code, or a football game without a ball? ANT simply highlights the entities within a network regardless of what constitutes it. It does not attempt to design the social or *solve* a problem but its role is to *sum up* and trace the social, in an attempt to explore and uncover what provides actors with their actions and conditions that makes it possible for it to socially exist, form, or become its current state (Latour, 1999). As a framework, ANT draws on the relativist to examine the social, allowing the turn of events to provide the researcher with the resource to render social connections traceable (Latour, 2005, p. 30). ANT facilitates investigating complex systems, enactments of objects within this context, and the multiplicity in which they occur and interact with one another (Law, 2004, p. 59). ANT details nonhuman entities (e.g., technologies) as part of the social, forming a single network system and not just as a mediating interaction (Tsvetkova et al., 2015).

Before proceeding, it is imperative at this point to clarify the assumptions of what ANT means. The term itself is one that Latour (1999) argues is convoluted in its perceived meaning, due to the name, stating that “there are four things that do not work with actor-network theory; the word actor, the word network, the word theory and the hyphen! Four nails in the coffin” (p. 15). First, the word *actor* deviates from traditional notions of an actor as one whose role is predetermined and follows a set script regardless of how events unfold. An actor here can both be human and nonhuman, in this state an actor maps the social context in which it exists or is placed by eternal forces, although not the source of an action it is defined by its own action, it elicits actions from others, and in turn it is the target of action from other actors (Latour, 2005; Law, 1992, 2004). While the word *network* has often been used to describe the structure of the Internet, and largely now associated with casual social connections among humans, the term *network* in ANT refers to an elusive system, “a series of *transformations*— translations, transductions— which could not be captured by any of the traditional terms of social theory” (Latour, 1999, p. 15). A network is what becomes visible by following actors and tracing their actions, the consequences of these actions as they navigate and the social sphere (Latour, 2005). Latour (1999) refutes the notion that ANT is a theory of the social, because the researcher does not prescribe what the social is made of or know exactly what is going to occur, stating that “ANT does not tell anyone the shape that is to be drawn— circles or cubes or lines— but only how to go about systematically recording the world-building abilities of the sites to be documented and registered” (p. 21). In this regard, in adopting ANT one has to rely solely on the rich narrative, vocabulary, and accounts of the actors to aid the social scientist in portraying the phenomenon. The objection to the *hyphen* in ANT is that it conjures up the premise or debate of agency versus structure, where at one end the (*actor-*) appears to super impose and emphasize

human led action (actor), while at the other end the (*-network*) focus is on the dissolution of humanity in associations, highlighting a wider or more elaborate social context. The role of the *actor* is not reduced to playing agency and the *network* that of society, but rather actor-network designates the same phenomenon and the same network or system (Latour, 1999, p. 19).

3.8.1.1 Actors, actants, objects and agency

Perhaps a question that comes to mind regarding what is considered an actor in ANT is how the activities and accounts of nonhumans/objects are captured and recorded in the describing the social since they do not necessarily have to speak or enact themselves as humans do. The activities of these entities are captured through causation, the traces they leave behind and connections they make just like any other actor; they are no different. To use the word ‘actor’ as part of describing the social means that a vast array of entities come into play, borrowing, distributing, and translating action as well as connecting sites (Jensen, 2009). Through this process actors are able to propose and explain their agency and role in the system (Latour, 2005). ANT allows the social scientist to account for the presence of all *social factors* at work, especially where their impact may not be palpable to general observation except for the description from actors that make this unearthing possible (Latour, 2005). Adding non-humans to an assemblage of the social often disrupts the familiarity in tracing social connections and ties but their role has to be considered in the wider scheme of things. When nonhuman entities are give actor roles in ANT, this is not to say that they are endowed with the abilities of humans and can take the place of humans, but rather that they are simply part of what constitutes the social and should be accounted for if or when they make an impact on the state of things. For example in criminal legal matters, the result from a forensic laboratory test has more authority in court as evidence and is more reliable than the recollected account of human witnesses (Latour, 1993).

Law (2004) espoused the role of nonhumans in this context:

Objects, then, don't exist by themselves. They are being *crafted*, assembled as part of a hinterland. Like representations they are being enacted 'in-here', while sets of realities are being rendered visible out-there, and further relations, processes and contexts that are necessary to presence are also disappearing. (Law, 2004, p. 54)

While forensic data may have been crafted and taken form in the laboratory, its relevance in this enclosed space (lab) is somewhat meaningless, unless it *exists* in the lab and is entered as evidence in court where its relevance is given visibility and has a real world application. When human and non-human actors are framed as part of the enactment of an event, their roles become defined in relation to each other and the event. They become *actants* based on the role they perform in this process (Law, 2004). In this event, when one influences or manipulates the other into action, it does not mean that it is the origin of the action in question, but rather that it facilitated other actors into performing their own innate action (Latour, 2005). An *actant* is what is made to act through agency— if it is yet to be given figuration it is an actor (Latour, 2005). For example if an actor says that they have an avatar, this is entered into account as an actor (Jensen, 2009). When the actor describes how they deploy this avatar in the virtual world in meeting other avatars, forming friendship and exploring the virtual world, this figuration of an *actant* can be given to the avatar. Figuration entails providing the actor an account with “some flesh and features that make them have some form or shape, no matter how vague” (Latour, 2005, p. 53). This is endowing an agency or action with a name, form, or outline. It is providing a chronology of its action and impact on the state of things, ridding it of its abstract existence. The software code and script that works behind the scene is what gives agency to the avatar since they set the existential conditions and laws in which the avatar exists (Jensen, 2009). Going back to the forensic *laboratory test* example, in the laboratory the test exists as a forensic report (an

actor) and through the process of the prosecuting attorney's cross examination and forensic expert's testimony (expertise and experience), the forensic report gains figuration and becomes *evidence* (actant) in court.

Latour (1999) positions the actors as important to the work of appropriately depicting the social, and describe their roles in relation to researchers:

Actors know what they do and we have to learn from them not only what they do, but how and why they do it. It is *us*, the social scientists, who lack knowledge of what they do, and not *they* who are missing the explanation of why they are unwittingly manipulated by forces exterior to themselves and known to the social scientist's powerful gaze and methods. (p. 19)

In ANT, since actors partially build their space and environment through their narrative or accounts, their task is to define and order the social. The role of the social scientist or researcher is to follow the actors, trace, and capture connections or activities and the derivative consequence of their actions in the environment in which the actors are immersed. An actor does not come into play simply because it exists as part of the system. If an actor's account has to be registered, it is required that it makes a difference and renders change to the state of affairs (Latour, 2005). An actor may exist in form, where it is not yet a bona fide participant in the scheme of things. In some instances, a researcher may have to move the tracing and analysis to a different site for a specific actor to emerge with its role and action becoming more visible (Latour, 2005). When we observe an actor acting, Latour (2005) asks what else is acting, present, or causing the actor to act and the forces that holds up the social, noting that "action is not done under the full control of consciousness; action should rather be felt as a node, a knot, and a conglomerate of many surprising sets of agencies that have to be slowly disentangled" (Latour, 2005, p. 44). Agencies can be teased out of the accounts of actors. They are typically presented in the account as making a difference— doing something, and when this ceases it is no longer an agency and much like the

actor when they leave no traces of their effect or action within the system; they are removed from the narrative (Latour, 2005). This is how the researcher decides on what actor on which account or traces to follow. Latour (2005) provides an example of this external force on an actor citing a university graduate becoming estranged from their parents, feeling ashamed about how dumb they have become, and wonders what has created this estrangement: is it the age difference? Is it the acquired higher education, the lower class or culture capital of the family? Understanding this passive, taken for granted influence aids in tracing, mapping, and adequately depicting the social as we see that action can be *overtaken* from an actor by external forces, where “action is borrowed, distributed, suggested, influenced, dominated, betrayed, [and] translated. If an actor is said to be an actor-network it is first of all to underline that it represents the major source of uncertainty about the origin of action” (Latour, 2005, p. 46). Researchers have to concretize actors’ action and agency through *figuration* in the narrative. As Latour (2005) observed, if there is an account of a hidden force or actor behind the scene impacting the state of affairs this is conspiracy theory and not social theory; hence, it cannot be entered into the account through figuration. Actors are able to theorize their action and explain their agencies and in some instances will engage in criticizing counter agencies or actors. Latour proposes that we move away from the view that only the social scientists possess the means of describing the social world of the actors and view them as being naive to their social world. Actors, like the researcher or social scientist, (who possess the *infra-language*) also possess the meta and reflexive language to articulate their accounts (Latour, 2005).

3.8.1.2 Mediators and intermediaries

Latour (2005) introduced two technical terms, *intermediaries* and *mediators*, to explain the nature of actor entities. These terms are defined in the way they convey meaning in their

workings. Intermediaries facilitate the exchange of action between actors, transmitting their intentions during interaction and aid in enrolling other actors and eliciting actions from them as well (Bapuji, Hora, & Saeed, 2012). The precise explication of intermediaries within ANT is as follows:

An intermediary, in my vocabulary, is what transports meaning or force without transformation: defining its inputs is enough to define its output. For all practical purposes, an intermediary can be taken not only as a black box, but also as a black box counting for one, even if it is internally made of many parts (Latour, 2005, p. 39)

In this regard, any entity or device that transports meaning could be classified as an intermediary, extending from humans, letters, newspaper, electronic devices like an overhead projector, and social media platforms. Latour (2005) provided the example of a properly functioning computer as a complicated *intermediary*, while a faulty one may turn into a horrendous complex mediator composed of many parts that all have to be tested to diagnose the faulty component. To provide more clarity to this example, let us imagine the first instance, a working computer. It is complicated in its makeup, internal workings and function. A user gives it an instruction to compute $A+B$; the user might not know the value of the end product, however the user expects the answer to be the sum of A and B (or AB). The computer produces (transports) the value of the instruction and outputs the value C (the sum value of $A+B$), therefore the input defines the output. If numbers were given as the instructions, one should expect a number as the output. The computer here is a black box.

Mediators, on the other hand, are unfixed and complex in form, especially when in action, they might account for one or more, infinity, or for nothing. Latour (2005) notes that “mediators transform, translate, distort, and modify the meaning or the elements they are supposed to carry” (Latour, 2005, p. 39) and they continuously transform networks and assemblages (Jensen, 2009). The specificity and manner in which a *mediator* is deployed has to

be recalled and considered when describing it, since its input is never a good indication of their output. The example given by Latour (2005) is a *banal conversation* as a complex mediator; it is riddled with the personal opinions, passion, and attitudes of the parties involved and this alters the meaning of the topic or context of conversation (p. 39). Mediators could also be customized personal avatars employed by users to explore a virtual world or play an online game (Jensen, 2009), since they translate user presence online as well as their interpretation of the self. Intermediaries and mediators aid in exploring the roles, traces, associations, connections, and relationships of actors as they move about and exert influence or impact within a network.

3.8.1.3 Networks and association

A key element of ANT is that it helps the researcher explore the wider structure of the social without leaving or abandoning the local sites, in tracing and describing the social. It allows the researcher to connect sites (both physical and abstract) in the description (Latour, 1999, 2005). In examining a network, Law (1992) questioned why words like *the British Government* are used as a single point actor without adequate examination of the *bits* and *pieces* that make up the government, Latour (2005) goes further and questions this in terms of hierarchy, asymmetries, and power relations, noting that a good ANT account is one that not only describes but deploys actors and fully traces out a network. A key practice to avoid is attributing one actor as the key source of igniting an action in other actors without adequately exploring other present leads that might also play a role in this process (Latour, 2005; Law, 1992). This brings us to the definition of what a network is in ANT. A network is the social concept, expression, and connection that captures spent energy and movement of actors, where each participant is active and a full-blown mediator, deployed as doing something as opposed to just simply transporting effects without transforming them: “it is a tool to help describe something, not what is being

described” (Latour, 2005, p. 131). Networks provide the field for the researcher to explore the social, as soon as an actor is not defined or treated as an intermediary, they render the social visible (Latour, 2005), and the researcher can begin exploring, mapping, and tracing the actions of the actor in the network through *association*. Like actors, networks can appear and disappear when they become inactive or leave no traces.

One of the tasks of the researcher within ANT is to trace *associations* and links, traces, or trails actors leave behind by their activity and narrative accounts. The key issue for the researcher is to decide how to set up groups and associations to decide where to begin the analysis. Since actor accounts are ever-shifting, delicate, tentative and often point the researcher towards other subject matter, networks, and sites, this becomes challenging. Tracing associations is concerned with how actors are mobilised, enrolled, juxtaposed, and held together within a network (Law, 1992). Latour (2005) noted that the central tenet of sociology is that at every given moment actors are made to fit into an existing group (p. 28). However, the process of tracing associations begins with acknowledging that one does not know what the social is made up of. There are no fixed groups existing perpetually as actors move in and out of groups (Latour, 2005). Tracing actors and their action involves noting actors that are making change to the state of affairs. This is easily ascertained by an actor receiving action (initiating its own effect on the system), propagating action (maintaining its own effect on the system while causing other actors to activate their own effect), or transferring action which is delegating its duties to another actor (Latour, 2005). Law (1992) proposes that we start tracing associations beginning with interaction and assume that it is all that exists, and then probe how it is that this interaction succeeds in stabilising and reproducing itself in adversity to external forces and how it generates effect or power (p. 380). Association could also be made when an actor is coming into being—in the

process of formation— since they leave many more traces in their wake than already established actors (who may be mute or have become inactive hence difficult to identify). An aspect one has to pay attention to are types of connections that are not themselves deemed social, a noted mistake social scientists make is listening distractedly and only paying attention to accounts that have currency in the real-world (Latour, 2005). An example of this can be only recording humans as actors, or not watching out for actors that have become activated or actors that have retreated into the background. Associations that are routine or become a routine are more likely to be taken for granted, especially if the entities that lie behind and make up an actor, object, or system are often ignored when drawing up networks (Law, 1992). For example, users are required to create a profile, username, or avatar to use social media platforms and the processes and decision making that goes into this exercise could often go unnoticed. Are users' choices limited to the options of the platform providers or will providing more options to enact online identity result in users adopting a simplistic approach? Association provides the means for the researcher or social scientist to keep track of the tracing activities, the actors, and how their actions are propagated or eliminated from the network.

3.9 Conclusion

This chapter covered the methodological approach taken in the research design, including the methods used for the data collection as well as the epistemological reasons behind them. The chapter also provided a concise summary of the participants, recruitment process, and the research site. It covered in detail the use of cognitive scaffolding through vignettes in the data collection process as well as a detailed account of the sessions with the participants. The data analysis subsection detailed how the data were analyzed as well as the ethical considerations taken into consideration for the research study. The chapter concluded with an elaboration of the

methodological implications of ANT. The next chapter presents the results and findings from the data analysis.

Chapter 4: Presentation and Discussion of Findings

The results and findings of this research are presented and discussed in this chapter in three main sections, each addressing the research questions stated in Chapter 1. The findings are analysed through the framework and perspective of ANT (Latour, 2005) and ODT (Brewer, 1991) as covered and discussed in chapters 2 and 3. In this analysis and discussion, the pseudonyms chosen by each of the participants are used to refer to them. The first section presents the research findings that addresses research question 1 and details a nuanced observed notion of interactivity that persists and exists within social media platforms and its impact on perception within these spaces. The section also presents data that points to how the participants understand social media platforms and the concepts and practices that inform this knowledge. The second section presents the analysis and findings for research question 1a, and draws on a narrative of assemblage in the analysis and findings of the enactment of self, shaped within the context and confines of social media. The last section presents the findings of how social cognition informs the manner in which the participants' process information about online identities, contexts, and situations during instances of online antisocial behaviour. This finding addresses research question 2.

4.1 Findings for Research Question 1

How do social media platforms reconfigure social interaction and means by which youth perceive and understand these platforms? This question aims to capture how social media platforms alter interaction, its mode of sustenance, and how this is understood by the participants. This question addresses how the participants engage within these platforms with other users, the impacts of this on their social interaction, and how they make meaning of the interactions. Discussing the relations and networks could easily be done solely based on the

actions of human actors and their relations to one another, with little or no attention paid to the nonhuman entities and their roles in social interaction. The participants discussed the importance of social media and highlighted how they interacted within their respective social media networks. This provided a means of understanding the mode of interactivity in these platforms. Shared content plays an emergent and central role in the way the participants interacted within social media platforms, not in the characteristic sense pertaining to the precise nature of the content, but in terms of how it causes *action* and binds relations and social ties.

4.1.1 Interacting with and through content

A key component and activity of social media use is the ability to share and engage with user generated content. In discussing the importance of social media, the relation to content and the nuanced role it plays within interaction becomes apparent. Kelly noted that “If you have something good to share, maybe you can put it online and maybe to show-off”. Wendy in the exchange below noted gaining awareness as being important in her use of social media:

WENDY: For me social media is important because you can know about things that are far away from you. Like what is happening in other places. Remember the text that they said if you receive it, it freezes your phone? It was all over Weibo that is how I knew of about it.

SEBASTIAN: What! When did this happen?

KELLY: I heard that too but not through Weibo, someone mentioned it to me, I thought it was fake.

WENDY: No it was not, it happened to people, the phone freezes or when it switches off you can't turn it back on.

SEBASTIAN: That is why I don't respond to text messages from numbers that I don't know.

DIN: It affects only the iPhone people; I don't use iPhone so I was not worried.

RESEARCHER: Did you also find that out through Weibo?

DIN: No, through Facebook. It happened to some people and they were pictures about it, and some people were just talking about it around.

DA: I use an iPhone and I didn't even hear about it, is it still happening?

KI: Me too, this is the first time I am hearing about it and I have got [an] iPhone.

Kelly, Wendy and Din's account highlights both ends of an archetypal interaction with shared content within social media networks, its dissemination, and consumption. For Kelly having *something good to share* online is a means to engage with other users, where they interact with her shared content regardless of her immediate presence online. In Wendy and Din's case, engagement with social media content serves as an extension of not only social ties but also collective awareness since both of them had access to the same content on different platforms. In the interaction to *know about things that are far away*, there is no direct reciprocity between Wendy, Din, and the user(s) that first authored the content about the mobile phone issue, the immediate interaction is restricted between Wendy and the shared story (the same notion also applies to Din). This disrupts the traditional notion of interactivity as third-order dependency as it does not necessarily occur in online interaction among users. In this sense, content online embodies an entity that causes awareness (removed from its human author), in Kelly's case it represents the *things* she chooses to share and in Wendy's and Din's case they know about a story not local to their immediate environment. The shared content merges into a network with human users and in the process of social interaction fosters interaction between human actors (users) and non-humans actors (shared content).

The following exchange below between Wendy and Kelly was in response to a typical activity or interaction that they undertake on the instant messaging app WeChat. It provides the depiction of this notion of sustained interaction with content devoid of direct human-to-human interaction:

WENDY: It depends, if it is funny or something that I like then I can share it. Some things are viral and already popular so you see it anyway. Pictures and videos from my friends I sometimes *like* them.

RESEARCHER: The popular or viral content, are they usually from people that you know?

WENDY: Sometimes, but they also share it from other people, maybe someone that they know that I don't know.

KELLY: Nobody knows, like funny memes or videos; you just share it if someone else shared it. No one knows who first posted it.

Wendy points to the actions she takes when coming into contact with shared content online, the process begins with someone posting or sharing content with Wendy, the *shared content* elicits an action from Wendy. If it is something that she likes or finds funny she demonstrates her admiration for it by *liking* the content, it is propagated through the network by Wendy sharing it with other users, and through this iterative process it further becomes removed from its original author. Both of them noted that they do not know the original source of some of the content that they share. The following three contexts help guide this discussion about this nuanced mode of interaction between dissimilar actors. First, when agencies are transported over great distance or terrain into a site, the new site becomes the *network*. The question then is what associations or connections are made possible and are they efficient in *formatting* the social? The second is to ascertain the nature of the agency being transported and to provide the meaning or definition of the *mediator*. The third is to identify what lies *in between* the association and connections between actors (Latour, 2005, p. 221). Din's response provides the context for examining this:

On Facebook, people share stories from newspapers and the stories usually talk about people with their real names, because [in my country] there are no laws restricting newspaper so they publish gossip news with the real names of people and others just share it on Facebook from the newspaper. People comment and read about it on Facebook. A lot of people know about it and maybe the person's family or friends know about the article and that can offend the person.

In this case, Facebook becomes a *provisional platform* for the story published in the newspaper (Latour, 2005; Law, 2004). It takes on the role and serves the original purpose of the newspaper which is to create an awareness of the published story. The story originates at one space (newspaper), it moves (over distance and terrain) and is remediated for another (Facebook),

having moved to a new platform, the story generates interactivity and assumes an assemblage. A version of the original newspaper story (Law, 2004, p. 60), that Facebook users can interact with (for example comment on, *like*, or share), enrolls other actors (Facebook users) into play. Facebook as a *mediator* facilitates this process of association between the newspaper story and Din, Din-other users, and the newspaper story-other users. The newspaper story circulates further, in its new site through other actors independent of the original source (the newspaper) propagating it. In the association and connection that lie *in between* Din, the story, and other users on Facebook, the newspaper becomes displaced even while there is a trail within the new site (Latour, 2005, p. 223).

The purpose of highlighting these accounts is to demonstrate a relation and interaction with content that lays the foundation to understanding online social behaviour (discussed in the next subsection). Online content demands something be done to it and its platforms influence how far it is shared or how intense other users (actors) engage with it but it strives for social action in the process of online interactivity. Latour (2005) summarized this notion and pointed out that “social action is not only taken over by aliens, it is also shifted or delegated to different types of actors which are able to transport the action further through other modes of action, other types of forces altogether” (p. 70). The premise of Latour’s argument is that non-human actors (in this example *shared content* or the rumour, story, etc.) are capable of participating in social interaction and being able to hold their own within a network. The newspaper stories referenced by Din are easily remediated for Facebook and take up a role as an actant in the process of social interaction via technical affordances on the platform (e.g., algorithms) that enable this easy visibility, valuation, and sharing of content as well as the Facebook users themselves. In this case, content serves as more than just a queue to interaction among users. The nature of social

media is one that demands sharing where actors (human and non-human) interact. Online content becomes central and the focal point of interaction in both cases and assumes the role of an in-between *actor* or mediator. In the use of social media, users can easily assume visible or perceived connectedness to online content devoid of direct interaction with other users. These accounts *designify* interaction as only an offshoot of direct human-to-human interaction as previously explicated (Petrina, MacDowell, Chris-Iwuru, Lee, Liu, Namae, Ralph, & Wang, 2016). Each entity in an interaction must be autonomous and able to send or receive message, that is the emphasis that reciprocity of communication as vital to the process (Kioussis, 2002). There is no third-order dependency in the interaction between users and online content.

4.1.2 Connectedness and reduced telepresence

In the previous section non-human entities (shared online content) were established as concrete participants and actors capable of eliciting action from others and as *actants* in social interaction (Latour, 2005). The process of interaction discussed by the participants falls within the concept of human-to-machine-to-human interaction. This is an engagement within a platform between users, largely mediated and defined by the social media content created among the users themselves. This mediated system of humans and machine requires understanding the network, actors, associations, and interaction, but also the behaviours that emerges from such a network (Tsvetkova et al., 2015). There exists a visible connectedness that occurs in this space however this does not translate into a corresponding experience of *telepresence* (Steuer, 1992). This is noted in the exchange between Din and Da:

DIN: I think the apps and social media gets addictive, not only for wanting to post things online like Nafeesa but just for keeping in touch with what people and friends are up to. You see how people have changed that sort of thing.

RESEARCHER: Changed how?

DIN: People who you are not in touch with anymore you get to see what they look like now and you just know what they are up to because of what they post. That is how I keep up. You know you have friends that you are not like everyday friends with, but you still friends with them. It is a way to stay in touch.

DA: So you one of those people that do that?

DIN: Do what?

DA: Like those people that always look at your pictures but they don't follow you, I had someone ask me about my sister I said she was not around, he was like 'but I saw her with you yesterday', I am thinking how do you know? I think he knows [my sister] and saw a picture I posted, but I don't even know him.

When Din talks about how people or friends have changed, and if there is no direct or physical interaction with them or at least it is limited, he turns to the *digital* representation of these friends to maintain association. A similar observation was noted in following account from Bambi:

BAMBI: I do sometimes check them out on Facebook and other things that they post but we don't really talk much. I am still friends with some of them on Facebook. Some I follow on Twitter too and if I see something from them that I like I sometimes retweet or leave a comment.

RESEARCHER: Can you give an example?

BAMBI: Example, like what?

RESEARCHER: An example of the 'something' from them you might like.

BAMBI: Anything, things about TV shows or what is happening in [back in my home country], all the gossip. That way I don't miss out on what is happening.

Din and Bambi's perceived social ties (connectedness) becomes more interwoven with these digital representations of their friends and the shared content they create, since they are more in direct interaction with them than the real users. In Din's case, the relation he has with digital content of his friends substitutes the physical interaction and association, where he gets to know how they have changed. This relation to content serves as a means to *keep up* and *stay in touch* without directly interacting (through the social media platform or physically). Da indicates she finds this connectedness— the familiarization with the digital representation but not the real person— problematic as noted in her response to someone who was familiar with her, possibly through her online content but not personally with her. Bambi enacts connectedness to the collective interest she shares with her friends (*things about TV shows*) and the shared posts

prompt her to access this shared discussion on those TV shows and serves as what maintains her ties to her friends back in her home country since it is not popular among her friends here in Canada. Engagement with content serves as medium of connectedness (in these cases with friends where no physical interaction or association exists); however the telepresence of the friends becomes reduced and therefore secondary. Kelly also pointed to this notion of shared collective interest as being a main point of her interaction online, noting that “[t]he first app I use is Weibo. It is the place where it’s all about my favourite Korean Idols; I post image or info about them. Sometimes I search for the images from other people's account”. Weibo becomes a platform for Kelly for exploring interest on Korean celebrity; the entities Kelly engages with might be created and shared by other users, but what drives her use of the app is the need to connect with entities that make up the multimedia of the Korean idols. When probed about the mode of interaction she takes with the content of Korean idols, Kelly pointed out that “I just finger them, like *like* the pictures. It's just about being a fan of someone. Like a crazy, crazy fan of these celebrities”. For Kelly, engagement with this kind of content becomes a means for self expression to share and engage with information about her favourite Korean celebrities, where other users or contacts in this space are secondary to the need to explore her interest.

Nick provided a more apparent example that embodies this connectedness. When asked about the social networking sites or apps he uses and his reasons for using them, the following dialogue below ensued:

RESEARCHER: What is that? Could you describe what that site is?

NICK: Tieba, basically it is just a website where people post things on, I just enjoy seeing and reading what other people share or post.

RESEARCHER: Can you give some examples of the nature of the contents that you enjoy reading?

NICK: Just the things that are on there, normal stuff like comments on latest games, hacks, cheat codes, or gaming videos.

RESEARCHER: So is it more of a gaming platform?

NICK: No, you can use it for anything; I just go there for gaming stuff.

Nick discusses the platform in terms of the gaming content (latest games, gaming hacks and cheat codes) as the key factors that drive his visit to the website. Nick's account points to the content generated by others as sustaining his interaction, where the direct interaction with the authors or other users becomes a by-product of using the site. The relation and connectedness to content in social interaction impacts the perception of users in terms of being able to acknowledge others (telepresence) as with one-to-one physical interaction. The following response from Nick provided the basis for this notion:

NICK: In the video the player was talking about what happened you see the other player that crashed into him. The [profanity] is about what happened. It is funny if you know about the game. Imagine being killed off by your own teammate.

RESEARCHER: Is that how you see it? Do you think the other players or the player that the comment was directed at see it that way?

NICK: I don't know to be honest, but he cannot see the other player so how would he know. He just said it.

RESEARCHER: If that was directed at you what would be your response?

NICK: Nothing, I mean it does not really apply to me, but let us say he said something that applied to me, I wouldn't even care. I just keep playing on. You see everyone is just laughing.

The above discussion was in response to a video Nick shared in one of the interview sessions.

The short video recording was of a MMORPG, the recording showed gameplay in progress. One of the players crashed into another player who belonged to his team. The player who was crashed into uttered a racial epithet in reference to the player that crashed into him. Nick understands the action of the gamer as being directed at the gameplay or at the action of the other player and not necessarily at the real person playing the game. The basis of his response is that the player who uttered the racial epithet could not see the other player and as such could not possibly know his race. This stems from the apparent non-perceivable *telepresence* of the other player, since one could only see the gaming avatar and not the person behind the avatar. Nick concluded that it

was directed at the actions within the gameplay. In this case, being able to perceive or notice the *other* is blurred and impacted by the sustained relation and connectedness the player has to gameplay. An observational research finding noted that MMORPG users do not interact directly with other users as much as previously thought (Tsvetkova et al., 2015). One of the criticisms of *mediatized* communication especially as it occurs within social media platforms is that it has led to alienation, loss of intimacy, and emotion in the way users interact (Papsdorf, 2015). In the contemporary age of social media while interactive connectedness to objects (human-to-machine) persists, *telepresence* and immediacy is lost or absent.

4.1.3 Platform-culture

Certain behaviour, practices or experiences were explained away or justified by what I have termed *platform-culture*: this is the prevalent and socially acceptable practices within a social media platform cultivated by its users. This phenomenon does not only shape the manner in which the self is represented within the platform but also how the participant interacted, behaved, and understood these platforms. The participant adopted and assumed the practices and characteristics that are peculiar to the online platform and its users. These practices and characteristics are not necessarily transferred to other social networking environment unless its own *platform-culture* permits it.

In relation to the gaming video incident discussed in the previous section, the following discussion resumed during the interview with Nick:

RESEARCHER: What kind of game is this?

NICK: Just some online multiplayer shooter game.

RESEARCHER: And what was the response from other players and the player it was directed at?

NICK: There was no reaction just laugh at what happened. I put it down as a joke; some people get too much into the game. You see the player crashed into his own teammate. You see the explosion in the video right? We just laughed it off.

Nick's reaction to the incident points to how MMORPG informs his understanding on the nature of interaction that takes place within this space, he sees such an utterance as jovial and a characteristic part of gamers becoming overwhelmed or too involved in gameplay. While this could be attributed to a sense of immersion or the immersiveness of the game, where a gamer might feel a stronger connection to the experience of the game as more real than the physical world or human at the other end (de Larios & Lang, 2013; Steuer, 1992; Teng, 2010; Tsvetkova et al., 2015), Nick's follow up response acknowledges the influence of the *platform-culture* of gaming space as being responsible. The absence of a response from the other players is also indicative of the environment where gamers expect such behaviour. MMORPG typically requires players to play in teams, overtime this long-term collaboration produces a formal system where players see themselves as an organized group and develop their own culture, social identity, and code for assimilation (Brewer, 1991; de Larios & Lang, 2013). In explaining his own attitude and response to the incident, Nick references the collective—gamers—in pointing out that such attitude and response is common within gaming:

RESEARCHER: Do you find such occurrence in other online gaming circles?

NICK: Yes.

RESEARCHER: What response do such remarks get from other players?

NICK: Nothing really. Sometimes one person might just say 'oh that is so racist' but in a joking way and it just dies off, most people just laugh it off. We know it is not serious.

Nick as an individual, is mobilized into a node of *assembled peers* (de Larios & Lang, 2013), trading an aspect of the self for group association (Brewer, 1991; Brewer et al., 1993), that exact its influence or seize agency from the him (Latour, 2005). Nick refers to the collective—*people/we*— as a means of surrendering agency to the group and this minimizes the individual as enabling or taking responsibility for such culture. Nick draws the conclusion that “we know it is not serious”, not by the individual but the collective. Nick factors in the socionormative

behaviour of the group or collective to his own individual personal decision (Brewer, 1991; Brewer & Roccas, 2001; Terry, Hogg, & Duck, 1999). Once users experience a particular nature of interaction within a platform over a long period of time, they understand the platform in terms of the prevalent interaction they experience. In this setting, individuals “conform to the perceived norms of their social identities, individuals are likely to publicly behave in ways that contradict or ignore their private attitudes” (de Larios & Lang, 2013, p. 104). Brewer (1991) referred to this as the optimal distinctive point where for the individual, the need for assimilation into the group culture is traded or balanced out by the personal need for distinctiveness. Nick’s attitude is not only influenced by the perceived costs and benefits of acting in line with the *platform-culture* but also by the perceptions that other actors (the collective, who possess significant roles) have a greater influence over the way he behaves in such spaces (Brewer, 1991; Brewer & Roccas, 2001; Terry et al., 1999). This action has been referred to as pluralistic attitude, where the group norm replaces personal attitudes and leads to behaviour contrary to an actor’s attitude (de Larios & Lang, 2013, p. 103). When probed if such utterances were also appropriate on other social media platforms, for example Facebook, Nick responded as follows:

I think on there that might be considered a bad thing if someone said it, but if you playing online games I guess it is okay, not that it is okay but everyone just understands that sometimes you get that with gaming.

Nick understands other social networking sites as dissimilar from online gaming, both platforms employ elements of social media, for example, users creating profile and using multimedia to enhance those profiles but here they are seen as separate spaces where certain occurrences are not permitted on one and are permitted on another. The difference is the *platform-culture* of a social media network, for example Facebook, is separate and different from that of a gaming platform like *Steam* or *Twitch*. This excerpt signifies how *platform-culture* alters users’ notions

and understandings of a space in relation to interaction and notion of the social-self. In this case, Nick understands the gaming online environment by its *platform-culture* and the deriving interactions experienced within this space as just part of playing multiplayer online games.

4.1.4 Growing up online

The participants understand their social space as a place for experimenting with the self while growing up. The participants noted this phenomenon, in a reflective sense, how they portrayed and viewed their online presence, especially in the way it comes across to others. This was noted in the exchange between Kelly and Wendy:

KELLY: Yes, that is why I always delete my old pictures or comments on my social media, like once or twice a year.

WENDY: Yeah me too. When I look at my old post I sometimes feel really embarrassed about them, like did I really post that?

The exchange between Kelly and Wendy points to the experiences growing up on two separate plains: online as well as in the real world, and they become mindful of the digital trail left behind by living and interacting online. The difference being the virtual world documents the process of *living* and *interacting*, and this process enters into account a new actor *online presence*, an abstract of the self that holds and serves up previous enactment, one that the existential self (of both Kelly and Wendy) is bound to encounter with actions such as “delete” or “feel really embarrassed”. This encounter is highlighted in the following exchange:

KELLY: Well not that the comments are bad but I just don't like that maybe I expressed myself too much or something, but the pictures I just don't like my old pictures. Because I feel like *the me* in the past was stupid or silly, so I delete it and post new stuff.

WENDY: And the new post and pictures are still stupid.

KELLY: Yes and I think after five years I will probably look at them again and feel that they are silly and stupid and delete everything.

In this encounter the *online presence* is experienced as removed from the self, Kelly sees it as a counter and illegitimate actor, and engages in criticizing its agency as being too expressive,

stupid, or silly in an attempt to *withdraw* it from account (Latour, 2005, p. 56). In this process, the counter actor is displaced as Kelly maps and mobilizes into the network of expression of self a new *online presence*, which is in line with the existential self. A key relation of this association is that Wendy and Kelly both acknowledge that the new *online presence* would probably be a *counter actor* in five years and the same process will be repeated.

In the experience of growing up on multiple platforms, other participants adopted a different approach to dealing with counter actors or endowing them with legitimate roles, for example Sebastian noted of his activities online: “No, for me I hardly ever delete any of my pictures or post”, projecting a sense of little impact to growing up online and Kelly responded stating that “That is because you are a boy”, the following exchange ensued:

KELLY: It is just that way; it is just different for us than guys.

RESEARCHER: How so? Give me an example.

KELLY: Maybe one for example if you post a *selfie*, image or something funny, if you didn't get enough likes or shares that you expect you delete it. Also if you think that it is ugly you delete it as well.

WENDY: Yes and sometimes if it gets bad comments too you can delete it. Guys don't really care about such stuff.

RESEARCHER: What about the guys, do you view your online post the same way?

SEBASTIAN: No I always get the *likes or share* that I expect from any of my post.

NICK: Personally I don't care too much about comments online especially about me.

Kelly discusses her online activities in terms of acknowledgement from others, if her shared content does not generate active participation from others through “*likes or shares*”, it is deleted. In this sense it could be argued that Kelly views her content in terms of the level of interactivity that it generates. Wendy shares the same notion; however in her case it is not the lack of interactivity that prompts the deletion of content but negative interaction. The two other participants do not view their content in this sense and for Sebastian this is because his content is not shared or viewed *in relation* to other users. Nick points out a view of the concept of self *devoid* of acknowledgement from others. The goal here is not to delineate this experience along

gender lines, as this is not the case. I would argue that they all acknowledge *counter actors* in their online activities; however they are dealt with in different ways. While Kelly and Wendy engage in critiquing *counter actors* and agency by de-legitimization and deletion, Sebastian and Nick may well deal with it pre-emptively, by *not giving life* to abstractions of self or content that they know might become a *counter actor* in future. This was the case with Din who noted that “I always consider a lot before I post anything online, so I don't regret anything later. Maybe that is just me”. In this excerpt Din acknowledges the *other* in relation to his online activities and for this fact he is mindful of what he posts or share online. Ki expressed a similar notion and noted that:

the more time I spend on social media the more things I post, sometimes the you don't even remember what you have posted, then someone says 'you said this or that at this time' and you shocked because you can't believe you said it, or that this person actually remembers but then you know it is true because you see it. So yes I do get conscious of what I share online now more than I used to.

The manner in which Ki lives her life online and the nature of what she posts is altered by how other people may view or remember it, and the fact that it takes on a life of its own that she does not recollect. The assumed new mode and nature of online posts is one she does not want to be *shocked* about. Without the excerpts above, if one examined her new line or post, it could be assumed that Ki shares content online regardless of others since she never feels remorse or display being too mindful of what she shares. Through her account it is established that her posts are crafted in relation to others, similar to Sebastian, so she never has to delete them like Kelly or Wendy. The point to be made here is that the participants acknowledge and understand their online social spaces as explorative spaces for the self, where you can live your life and deal with counter actors and consequences or attempt to limit the actions that would result in the means of repetitive process of altering oneself online.

4.2 Findings for Research Question 1a

To what extent does the technology within social media platforms act as a metaterritorial domain in shaping the production of the digitally mediated self and steering of agency? Research question 1a examines how contextual factors, affordances, and practices within social media platforms influence the manner in which the participants shape and deploy the performance of self. The findings for this question provide analysis of qualitative data that address the relational production of the digitally-mediated self that is fragmented, non-stable, and one that also exists in multiplicity. The findings are presented and discussed through a narrative of *assemblages* within ANT (Latour, 2005), that employs entity tracing: a process that comprises taking into account of the intrinsic and external social factors, actors and objects that come into play in explicating how *forms of existence* (Luke, 2002) of the self come into being.

4.2.1 Assemblage: Self as assimilated

Social media adoption by the participants is largely influenced by the need to be assimilated into the social media environment. The participants cited friends and a platform's popularity as motivation and reason for adopting a social media site or app; this also includes the motivation to socialize and make new friends. For example, Din noted about his use of Facebook that "the reason I chose to use it is because all my friends are using it". Owen cited a related reason stating that "I use QQ mainly because it has lots of people on it, so on there it is easy to make friends or find your friends on there". Sebastian noted that "I use WeChat because it is very popular in China, and all my friends are using it". In these excerpts, Facebook, QQ, and WeChat are characterised as providing the ability to forge new friendships, while serving as an extension of physical world association. The need to have presence in platforms to suit existing contacts is demonstrated in the nature of Da's social media use:

I just go for what my friends are using, it is easier right? Because if you using an app and none of your friends are using it is hard to communicate. I just go for what everyone is using. I have some apps that I use with certain friends and apps that I use with others.

Wendy, highlighting a similar notion stated that “some apps are more popular here [in Canada] but not in China. I only started using Facebook here”. A key observation of the above stated accounts is that the participants made no direct reference to a specific technology feature within the social media platforms that attracted them to use it in the first place, but rather it is the general concession of peer usage and popularity that drove their adoption. Da views her adoption as being important to sustaining meaningful interaction with her friends. She maintains *online presence* on different apps for communicating with separate groups of friends, which is an easier alternative for her. For Wendy, given her current social circle and location, she adopts the use of Facebook which is popular among her friends here in Canada. For both Da and Wendy, they use these apps as a means to maintain a form of self; that is, self-categorization between different groups of friends. In this process, the self is assimilated into the group prototype (Terry et al., 1999). The self is a seamless part each of the group, where it is attuned to the existing contacts of each space (Brewer, 1991).

The key rule of assemblage in ANT is that if the actors are to be followed one must also trace, follow, and demonstrate the roles of the objects that the human actors point to as well (Latour, 2005, p. 240). The actor-network of entities that fosters the assemblage of self as assimilated are listed in Table 2. Abstract entities are listed as humans if they draw from innate human capabilities or action, and this is influenced by the tenet of assemblage. The influence of the collective as peers and friends does not only drive adoption or selective use of a platform, but also drives boycott as well. The following is an excerpt from Din, he noted that:

If it is popular especially among your friends it is hard to make them change, there are some that I used before, but I don't use anymore because other people, I mean most of my friends just stop[ped] using it.

Table 2: Self as Assimilated Actor-Network

Human	Nonhuman
Friends	Facebook
Socialize	QQ
Adoption	WeChat
Selective Use	Popularity
Boycott	
Self Categorization	
Online/Offline Association	
Collective Influence	

Din's resignation to using the same platforms as his friends is tied to the fact that it is difficult to exert his own individual influence on his peers to make them change the social media platforms they use, especially if it is popular. A key observation about Din's account is that the collective influence resulted in his disuse of other platforms. This highlights the need to assimilate the self into the collective practice and norm. The influence of the collective goes beyond the digital or virtual space and transcends to real world association. The individual feels the need to self enact and act within the affordances of the group within the platform as well as offline. Din notes the following:

I think it is important for me because you know for example when you are all going out and everyone is using it and you are the only one that is not using it or doesn't have that app, you can be left out. Sometimes you pretend that you are using it also, and then quickly download it.

Din hides the fact that he does not use the app, because his identity is tied with that of the group and must enact himself as part of the group in the physical world as well as the virtual space. For

Din, not being a user of an app popular with friends also means being left out of social interaction and activities in the real world.

In this assemblage of self as assimilated, “an individual must learn the appropriate socialization rituals. Knowing these rituals and being able to play a proper front stage role is crucial in order for an individual to get along with others” (Brignall & Van Valey, 2005, p. 338). In this case Din learns to maintain friendship on two terrains, within the virtual space of the app and offline in the physical world, where each terrain serves the sustained association of the other. The participants’ adoption of a social media platform is not based on the specific platform features that may be directly suitable to their needs but based on the platform’s popularity and ability to facilitate the enactment of self as assimilated among salient group peers.

4.2.2 Assemblage: Identity as fluid and layered

The participants carried out a group exercise as part of the focus group session to discuss online identity. The activity was to aid the group discussion and it involved producing a visual artefact that associates their social media platforms with online activities and aspects of online identity (Figure 2). The manner in which the participants discussed and associated their online identity was fluid, unfixed in form, and non-definite. Online identities were dependent on situational factors and the context demanded the type of identity enacted. For example, the use of a *‘fake name’*, *‘fake picture’* or expressions of *‘how I feel’/ ‘real feelings’* were typically associated with micro-blogging sites like Weibo, and instant messaging apps like WeChat, and QQ; while the use of *‘real name’* and *‘real picture’* was associated with platforms such as Facebook. Activities *such as ‘talking with strangers’*, or *‘having strangers’/ ‘unknown people as friends’* were typical in platforms like Instagram and gaming sites like Steam and Battle.net. The

visual artefact served as a reference point for the participants to discuss the context behind these associations.

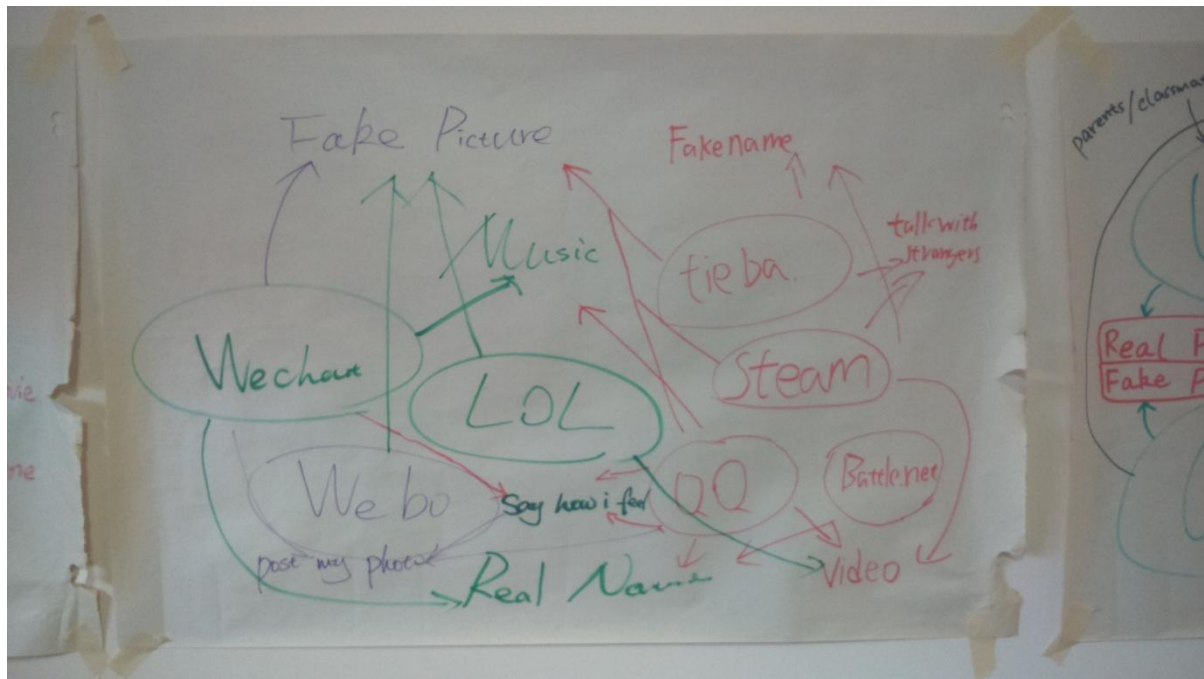


Figure 2: Online Identity and Online Activity Association

The means of deploying online identity becomes elusive; because its form depends solely on the context it is being discussed. Identity is discussed as an entity that is negotiable, for example Owen noted one of these contexts:

I use QQ, and some others which I don't remember as I don't use them anymore. Some of them had fake names; I just use them for making friends or meeting people. Sometimes when you know them after a while you can tell them your real name. But now you now know them better.

Owen starts off his association online with a fake name; this is the *de facto* self, expressing his real identity is negotiated with other users as he becomes more familiar with them while still maintaining the fake identity with others he is unfamiliar with but maintains online association.

Owen offers an explanation for this assumed assemblage of self:

If I use a fake name or nickname, my friends they know it is me. That this person is [Owen], if the people I don't know [personally], know me [online only], they don't really know me, so how would they know if it is my real name I am using or not?

Owen understands the use of *real identity* online as negligible, and the online space as a place where it should not matter much if one assumes their real identity or not. The assumption is when strangers are involved, the real self can be negotiated given the circumstance. When he assumes a nickname online, his friends know his true identity. So his nickname should not matter to them. If he becomes friends with people online since such associations are solely based online and they do not truly know him personally (in the physical world) it should not matter to them if he uses his real name or not. Identity becomes negotiated based on the purpose of using the platform. Nick pointed out that "I use different pictures, depending on if I use it to show my gaming or I use it for chatting with friends". While playing games online, Nick provides a sparse identity, since the objective of this *space* is to play games, although there is direct interaction with other players this is not the sole purpose of most MMORPG platforms. The context of assuming a real identity online is situated as being conditional, for example, in contrast to the above scenario concerning strangers. Sebastian, who noted that he uses his real identity online, observed the following:

I only use Wechat, because Facebook and Instagram are banned in China, for Wechat I put my real information, I use my real picture, my real name and where I am from. I add anyone as long as we know each other.

The use of his real identity on WeChat is conditional on him having only known contacts as friends on the platforms. In another instance, identity is described as being real based on the targeted audience. When probed about her use of a fake name on some of her social media accounts, Ki noted:

I still don't consider it to be a fake account even if it doesn't have my real name or picture, because the people I am friends with are real and they know the real me.

Ki refutes the notion that the social media account in question is fake. She argues that while the name is not her real name, her offline friends who are also friends with her online *validate* this assumed identity and as such her online identity is *real* to her and her friends who know her. In this case identity is considered real if other interacting actors acknowledge this regardless of the identity being projected.

In other instances, the assumed identity was layered in the way it is deployed; ascertaining if it is real or fake can be problematic. Din noted the following about how he represented himself online:

I put my name, it is my nickname but some people will not know that it is actually me. But on my Facebook is my real name, my Vietnamese name, so family and people from my country can understand and know that it is me.

In enacting the online self, Din attempts to maintain a form of real identity or self while at the same time assuming a semblance of fake identity. In one of his social media accounts he assumes a nickname that his friends know him by and on Facebook he uses his real Vietnamese name but is not known by this name to his non-Facebook contacts. This gives him a form of pseudo-anonymity, a veiled identity. For people who know him by his nickname he maintains the distance of unfamiliarity as the nickname permits a level of anonymity. Turkle noted this as the flexible self and that “[t]heir flexible self is not unitary, nor are its parts stable entities. A person cycles through its aspects and these are themselves ever-changing and in constant communication with each other” (Turkle, 1997, p. 1105). Another example of this attempt to maintain a layered or multifaceted identity is noted in Kelly’s response:

KELLY: Because anyone can see you [profile], and I don't like to show myself to strangers.

RESEARCHER: If you don't put your real information how do you then interact with your friends?

KELLY: How do you mean?

RESEARCHER: I mean if you have a picture that isn't you or your real name, how do your friends on the platform easily know that it is you and interact with you?

KELLY: Oh, I use a name that most of my friends know me by, I don't want to say it.

RESEARCHER: Ok, so it is kind of a nickname

KELLY: Yes, actually some of the pictures are my real pictures. But I don't put like my real full name, address, and school that sort of thing.

Kelly wants to be discoverable online but this need is countered by the need for anonymity. She assumes a name that only friends can associate her with while limiting easily identifiable information, such as the name of her school. In this case, the approach of having multifaceted or layered identity is assumed as the *de facto* stance toward online identity. Turkle (1997) suggested that in dealing with technology teens do not construct hierarchies in relation to identity but define it in terms of parallel definition, which alternates through rapid cycling: “parallel definitions, like thinking about one's identity in terms of parallel lives, gets to be a habit of mind” (p. 1109). The online space is where identity is negligible, negotiated, conditional on familiarity, veiled, nested, and parallel; hence it is an elusive object (Law, 2004). Social media platforms serve as a *metaterritorial* space where identity is maintained at different levels to a varying degree of veracity or distance to the self, this assumption also indicates a different notion and understanding of online space and the physical world (Luke, 2002).

4.3 Findings for Research Question 2

What role does social cognition play in youth perspectives of online identities and interactions in relation to cyberbullying? The finding for this question aims to inform and address one of the prevalent issues of the social web, cyberbullying and online antisocial behaviour. This research question examines how social cognition informs the manner in which the participants process and understand social context information about the online world, and how it is employed in the manner and process in which they understand and engage with actors

within the context of cyberbullying. Two vignettes and one case study were employed (Appendices E and F) as scaffolding during the focus group interview sessions.

4.3.1 External observer: Recalling social schema

In exploring incidences in the vignettes, the participants' responses centred on whether they viewed the events depicted as a case of cyberbullying. The first line of enquiry and response was from an *external observer* role, where the participants assumed distance in examining the vignette. The categorization of the depicted events in the vignettes as a case of cyberbullying was mixed among the participants. Some of the participants noted that it was a clear case of cyberbullying, a similar number thought it was subjective, and the rest indicated that it did not fit their observance of instances cyberbullying. In all (but one) response of categorization, the existing *social schema* of the participants and not the situational context or dispositions highlighted in the vignette determined their perspective in deciding if it was a case of cyberbullying or not. In assuming this perspective of an *external-observer* Nick noted that "It is close but not really cyberbullying, it is not serious cyberbullying". Nick subsequently noted that:

This is nothing, I have seen far worse online; if you are into online gaming like me and you really play you will see far worse, trust me this is nothing at all.

In this case Nick draws on his gamer experience in examining the vignette, an extended part of himself as a social media user informs this interpretation of events. Along the same line as Nick, Da noted that while this might be a case of cyberbullying, classifying it as such should rely solely on the target actor or character and noted:

Yes but it depends on the person, some might not find this to be bullying, I think it depends on *Alice*, if she thinks that it is, but to me no, there is nothing, I can't see any there that you can say is a hundred percent cyberbullying.

Here the overall assumption is that since it is directed at a particular actor, they (the character) get to decide if such action can be classified as cyberbullying. As Da notes, she cannot observe (indicating comparison) an action that she can certainly point out as cyberbullying. Sebastian similarly noted that he did not think the vignettes depicted a case of cyberbullying, and provide the context for his response, noting that “Because for me cyberbullying is something that *really really* hurts you, but in this case I think it may destroy their friendship but it is not that far for me”. Owen in agreement with Sebastian added that “what *Jane* and *Teri* did to the other girls is not nice, but I don’t think it is serious”. On the other hand from the participants who classified the scenarios as cyberbullying, Din was the only participants that did not reference external points or employ the use of social schema in his response. He pointed to his observing the situational and dispositional factors (repetitive occurrence) of the scenarios itself to inform his decision to classifying the vignettes as cyberbullying, stating that:

I read it a few times, I thought the same as them, that this not cyberbullying but I read it again and, if you see like when Teri always ask people to rate how Laura looks, I don’t think that is normal, like you just know something is going on.

In *the absence* of a reference point, Din refers back to the vignette to inform his judgement. He makes note of the repeated patterns from the aggressor in the vignette and concludes that it fits the case of cyberbullying. In examining vignette one (Appendix F), Din was not sure that it fits the case of cyberbullying. He still relies solely on the situational factors stated in the vignette to inform his observation and concluding viewpoint, noting that:

It might offend Alice, because she said she doesn't look like a princess. Which means she is ugly or something, Alice might feel bad about herself, she might not write anything online anymore, but I can’t really say if this is definitely cyberbullying, maybe it is or maybe it isn’t? I don’t know for sure.

Din subsequently notes that while he thinks this is a case of cyberbullying, he was not sure about the case of Alice and Jane being a definite case of cyberbullying and asked if he was right

or wrong. Din was reminded that there was no right or wrong answer as the aim of the research study was to ascertain their perspective and understanding. Ki and Wendy also stated that they consider the scenario depicted in the two vignettes to be a clear case of cyberbullying. Ki in particular referred to the vignette and pointed out that “For me yes, Alice posted something that she wanted to post, it is her right and Jane doesn't have the right to talk bad about what Alice wants to do”. Wendy added:

I think it is because if you notice the same person saying always making bad or disrespectful comments about you or even if they don't say it often, but if every time they talk about you it is something bad, then I think it is cyberbullying.

Both of them later cited personal instances where they witness a case of cyberbullying (as their social schema), similar to the one depicted which informed their decision to label the events cyberbullying.

In these responses, the participants' recalled experiences or notions (based on current or previous social interactions) in examining the vignettes; the situational context and dispositional factors of the scenario did not play a huge role in their decision to classify the events depicted in the vignette. While the events and context of the interaction between the actors were considered, it was the recalled social schema that defined how a majority of them decided and classified the vignettes.

When presented with the vignette, the participants initiate a mental process of interpretation and meaning-making. This process of recalling previous experience recruits, mobilizes, and enters into account their existing *social schema* (Latour, 2005; Pennington, 2000) as an *actor* that plays a role in categorizing the social context of the vignette. The actors at play in this process of recollection include the *individual* and the existing *social schema* (Figure 3).

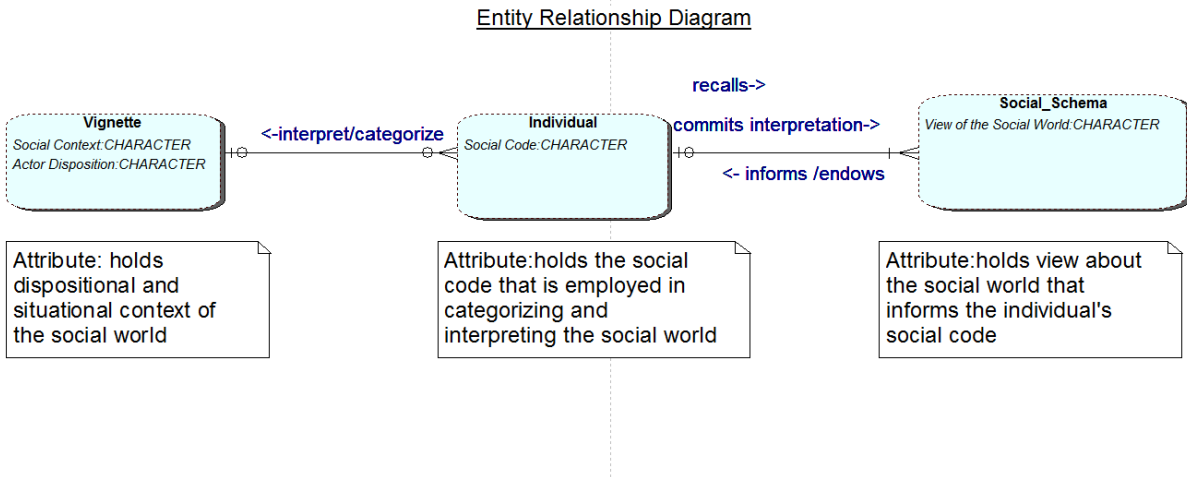


Figure 3: Actor-Network for Recalling Social Schema as an External Observer

The relationship between the individual and the *social schema* is one-to-many: an individual can have multiple *social schemas* of the social world; on the other hand multiple *social schemas* can be applied to one particular social context (many-to-one). This is why Da can hold two conflicting views about the vignette (although she later assumes the position of the vignette as not a case of cyberbullying). The *social schema* holds the summary of the individuals' social world, based on previous experiences of their social media use, and through the procedure of *figuration*. This summary subsequently endows the individual's *social code* with the ability to categorize new information about the online social world, in this case, the vignette (Latour, 2005, p. 54). Armed with this endowed tool, Nick, Da, Sebastian, and Owen compare the vignette to their existing social world view of online antisocial behaviour and draw their personal conclusion of the incidents in the vignettes. While Da does not directly recall her *social schema* in her view of the vignettes, she points out the interpretation or perception of what constitutes cyberbullying is dependent on *the target character*. In other words, the interpretation of such an occurrence as cyberbullying depends on the *social schema* of the target.

In ignoring the social context, dispositional factors, and characters in their categorizing of the incidence depicted in the vignette, instead relying solely on the process of recalling *social schemas*, the participants who did not classify the vignette as cyberbullying assumed a *passive attitude* and approach. This observation departs from the general held notion that when examining or explaining another person's behaviour (as an observer), emphasis is placed on the dispositional factors highlighted in the scenario of the examined characters or actors (Beer & Ochsner, 2006; Pennington, 2000). In view of exploring this observation, the next line of enquiry in addressing research question 2 takes an approach that immerses the participants into the context of the vignette as bystanders. The finding for this line of enquiry is presented and discussed in the next section.

4.3.2 Immersed-bystanders: Imposing social schema

In view of further exploring the participants' perspectives, they were prompted with questions that immersed them in the context of the vignette from one of an *external-observer* to one of an *immersed-bystander* where they act as a witness to the incidents in the vignettes. The participants were prompted to respond as bystanders on how they think the target character would respond and also how or what advice they would give to the character that was the target of the incident. Two key observations were noted in the participants' response. First, in the state of *immersed-bystander*, the participants imposed the *social schema* that informed their role as an *external observer* on the target character. When prompted how they imagined the target characters would respond, Da noted "I don't think she would respond, I think she would ignore Jane and focus on her blog". Da projects her own personal position and behaviour, informed by her *social schema* to the character noting that the target would focus on her blog as oppose to paying attention to the incident. This imposition of *social schema* was followed by an exhibiting

an evasive attitude to the incident. Da noted that if she had to provide advice to the target she would recommend an evasive one, stating that “if I know this person or I witness this, I would say to both *Laura* and *Alice* just ignore the whole thing”. Da defended her response, adding that:

It is just the right thing to do, what can Laura do if Teri doesn't stop using her picture on the voting app? It doesn't matter what you do, some people will still do what they going to do, so just better to ignore it.

The response from Owen also echoed this sentiment, while he responded that the actions of one of the actors (aggressor character) in the vignette were not cyberbullying. He noted that “I don't think she should care much about it, if she sees the comment after a while and if it was like a long time ago it doesn't matter”. The responsibility here is shifted to the actor who is the target to mitigate the circumstance. Sebastian who also stated that the vignette does not depict a case of cyberbullying and noted that the target character can de-escalate the situation, stating “I think she would ignore it or maybe just reply with an LOL”. This response from Sebastian calls on the target character to take a unique approach, by casually responding to the incident as an evasive approach, he noted that he would advise the target as follows

For Alice I will tell her to ignore it, but take what Jane said and change something in the following post. But next time don't tell Jane if she is posting anything.

Assuming and recommending an *evasive attitude* becomes the means in which the participants as bystanders intervene in the scenario. It offers a more progressive approach to assuming a *passive attitude* in the sense that the evasive attitude acknowledges the events depicted as problematic but takes action or inaction to address it, while the passive attitude does not acknowledge the events as problematic. Worthy of note is that Ki, who noted the incident as a clear case of cyberbullying, observed that “If I can I will delete the comment from my blog, I think Alice should just skip the comment and focus on the good comments”, opting for an evasive approach

as an advice to the target character; this might have been influenced by the response of other participants in the study.

Nick slightly deviated from the other participants in his response. First, immersed as a bystander, he held on to his passive attitude toward the incident and in response as a bystander he noted the following:

To this point I think the answer would be very sad to you because if I am Oliver I can't do anything. The case study didn't describe the personality of Teri, what happens is this usually; this is not your business. Why would you like to be a justice guy seriously? Why? You don't earn anything from getting involved. You just become an annoying person who gets involved in other people's business. What is he suppose to do? So what If I am Oliver, am I suppose to tell Teri to stop it? No, how could that be possible.

Nick refuses to intervene but ignores the actions and as he points out does not know the personalities of the characters depicted, the historical relations, or the interactions of the actors. This response is hinged on how he might come across to other users and he sees intervening in such matter as becoming someone who might be seen as getting too involved in other people's business. This stance is not assumed in isolation. Nick's response is solely informed by his online gaming experience. In defending this stance he notes the *social schema* that informs his attitude:

I don't know if it is really cyberbullying, if you think about some of the [definitions] of cyberbullying then almost everything online or in gaming is cyberbullying, whether you are winning or you losing it is all cyberbullying. Like this happens [a lot], you know the slow player who plays with others [in a team], and this is one of the players you end up with, and the other team is really good. Then they are [heckling] your team, and then you must [heckle] back at them. Whatever you say you don't mean it. You might say something like 'why don't you just go die or something' or 'go [expletive] yourself' or something like this. It is just the way it is, if you playing, you want to win and you want your team to win so you do everything you can and if someone is messing up the game for the whole team in that moment you might just say something.

The social schema that informs Nick's *social code* is not the typical experience of the average social media user; this schema is employed and used as a yardstick in examining the incidents in

the vignettes to ascertain if he views them as online antisocial behaviour. In responding to advice he would provide to the target character, the social world view that informs Nick's *social code* for categorizing his social interaction is projected on to the character. Nick sums up his advice as follows:

Just take it as a joke and move on, if it is getting out of hand go have a conversation with this person. If it crosses the line and gets too aggressive then she can get a teacher involved. The worst decision would be turning this into a fist fight but sometimes the situation can make you go that far.

In this response Nick projects his own interpretation of the incidence to the target character (Alice and Laura) in the manner he would handle such interaction. The first point he makes is to handle such interaction as being jovial (in comparison to other abusive behaviour he has witnessed or is accustomed to). This notion is informed by his own experience as a gamer although while he later points out an appropriate process of dealing with such behaviour and acknowledges the utterances as abusive, it is treated as light banter and part of using the social web.

4.3.3 Aggressive coping to the self as target

In responding to the context of a case study depicting cyberbullying (Appendix E), adopted from MediaSmarts (2015), the participants were moved from their role as *immersed-bystander* in the previous vignettes to an active participant in the role of an *immersed-actor*. The participants' responses were framed in an assumed state as one of the actors. In this assumed state of response, a more aggressive stance and attitude was exhibited to the incident in the case study. The original plan was to assign each participant an actor and prompt them to respond to the questions relating to that actor. However, I decided to let them to read through the case study, then choose and develop their own positions and defend them. This way a more natural, honest,

and active participation and response can be achieved within the group (Rector-Aranda & Raider-Roth, 2015). The first observation from the group was the difficulty in identifying a prescribed role of who the aggressor or target were:

DIN: This is a very difficult one to talk about, I cannot take one side on this one because I feel that both of them have like good points for arguments for what they did, can I speak for both because I can't take just one side.

DA: Yes, I am thinking the same thing, if you look at what happened it has to be Scott, because he used Facebook.

KI: No it is Colin because he went on Facebook first.

DA: Did he?

KI: Yes, that why people unfriend Scott.

DA: Ok, then the aggressor or perpetrator is Colin.

SEBASTIAN: No he did not do any cyberbullying, I think Scott is the perpetrator, because Colin did not do anything, it didn't say what Colin did on Facebook, if he made people unfriend Scott that is not cyberbullying it is outside Facebook,

OWEN: But he told people to unfriend Scott.

SEBASTIAN: Yes, it also said at school as well, is that cyberbullying?

KI: If he did it on Facebook it is cyberbullying.

The case study and the subsequent questions asking them to defend and justify the actions of the actors forced the participants to examine both the situational and dispositional factors. The exchange above indicates a normative view of cyberbullying that there is always one aggressor for every target, a right or wrong position. This is what informs the positions they take and defend. Din and Da, for example, saw the argument from the perspectives of both actors; Ki and Owen took the position that it depended on where *the effect* of the action is experienced (Facebook), while Sebastian attempted to make his point that *Colin's* action does not constitute cyberbullying since his action occurred outside the realm of social media.

Taking on a different stance than Sebastian, Nick noted that what *Colin* did constituted cyberbullying because its effect was experienced on Facebook:

It is not direct from Colin but it involves Facebook, even if he did not say it on Facebook for people to unfriend Scott, you know he must have done it there, but let us say he didn't, but people unfriend Scott on Facebook because of something Colin said, so it is

cyberbullying, all because he was talking to Linda? If I am bullied by somebody else using Facebook, making everybody else hate me, why can't I do the same thing to him?

In justifying Scott's action, Nick inserts himself to the role as a means of making a point and this way his position is more relatable. The normative notion of right or wrong informs his view; identifying *Colin* as first being in the wrong justifies the aggressive response. This line of justifying *Scott's* aggressive action was pointed out in the exchange between Ki and Owen:

KI: What *Scott* did is cyberbullying, I don't think there is justification for doing something like that, I know why he did it but it is still not right.

OWEN: He feels that is the only way he can respond that is why he did it. Imagine people ignoring you at school that is bullying too.

KI: Yes, like he has to fight back, if he is angry about it he would do that. I am not saying it is right both of them are wrong but *Colin* first started the cyberbullying and *Scott* is trying to defend himself.

Ki and Owen in assuming the role of *Scott* interpret his action as cause and effect. His actions are reactionary to the situation he was put in. Owen assumes *Scott's* position by attempting to position himself to the experience of being ignored by schoolmates. They do not view the actions as cyberbullying but rather as defending oneself from face-to-face bullying.

Din assumes the perspectives of both actors and makes his point in justifying the reasons behind their actions:

What he did was wrong, to tell other people to unfriend and ignore Scott and Laura is wrong especially for the reasons he did, but what Scott did does not compare to what Colin did, like he took it too far, like posting more things about Colin and now it has reached where other people have now joined in and threatening Colin, he took it too far.

Scott's action is justified by Din, but his position is that he believes the actions of *Colin* does not measure up to the more aggressive stance taken by *Scott*. When probed further on what would be a justifiable action Din noted "maybe after he just posted the Facebook group that should have been it, asking people to throw stones is too much, like now parents and the police got involved". This position of Din is also one that supports aggressiveness, although he wants the *Scott's*

retaliation to measure up to that of *Colin*. Sebastian agrees with Din's point, adding that "that is what I am saying, because all *Colin* did was make people unfriend you and don't talk to you that is nothing, if this was real you will always find someone who will unfriend someone else". When probed on if *Colin*'s action were justified, Sebastian noted:

No it was not, what he did was not right, but Scott's action is not right too, if someone unfriend you and ask people to unfriend you, you unfriend him too and ask your own friends to unfriend and ignore him too.

Sebastian finds fault with *Scott*'s response because he observes the action were not in line with the perceived aggression. Immersed in the actor role, the participants exhibited three main assumptions. First, in the case of perceived aggression of cyberbullying, there is always a right and wrong position. Secondly, this normative notion of right or wrong justifies aggressive retaliation. Thirdly, the retaliation should measure up to that of the aggressor. It is important to note that two of participants Wendy and Da took a neutral stance and noted that there was no clear justification from both actors, clarifying that the positions of both characters cannot be justified. As teenagers become exposed to experiences of cyberbullying and online anti-social behaviour, they gradually alter their understanding of their online space. This resulting notion is that they compare occurrences of online antisocial behaviour to the worst experience they know of or have witnessed based on the severity of exchanges among the characters and the known resulting impact of the occurrence. This defines and guides how they move forward in classifying or understanding an experience as cyberbullying.

4.4 Conclusion

The traditional notion and concepts of interactivity is continuously and rigorously tested in the age of social media with findings that warrant a call for new explication and retheorization of what constitutes interaction, including its far-reaching impact on how it details and dictates

the way users act, perceive themselves or others, and its mode of existence. The online social environment where this interaction occurs comes into *being* as an entity that is bound by the collective, formulates its *culture*, and exerts influence on real world bodies that conform to its will. If they must exist in this space, they are moulded to conform to the collective yet remain undefined in essence of how they are deployed and used. They must deal with other real world bodies in conflicting scenarios that they are ill equipped for, but must sojourn on since these spaces have come to define the very nature of who they are as teenagers and how they interact and live their lives. This chapter presented the findings and analysis, addressing how social media platforms have altered notions of interactivity and the way teenagers understand these spaces. These platforms enact a complex *metaterritorial* self, where agency is both surrendered and acquired. In this space, teenagers must learn to navigate the social world, relying on their own experiences and the prevalent culture and practices to guide them. ANT and ODT provided an ample framework for analysis and discussion of findings. The next chapter details the research implications, recommendations, and conclusions.

Chapter 5: Conclusion, Implications, and Recommendations

The aim of this research was to examine the means with which social media platforms have altered how teenagers interact, and perceive their online social spaces, and how these spaces influence the way they deploy and enact their online selves. A qualitative focus group interview was employed to explore this topic through the concepts of agency, interactivity, and social cognition. The findings were analysed through a perspective of ANT and ODT. The findings indicate a pervasive mode of interactivity that deviates from the norm, where the self representation is context specific and the understanding of these spaces are based on *platform-culture* and social schemas. This chapter presents a discussion and summary of the study, its implications, and areas where the findings are applicable for educators and social media firms as well as for future research.

5.1 Designification of Interactivity

The relation that exists between online content and social media users has reconfigured how socialization occurs online, forming an assemblage of human-machine networks (Tsvetkova et al., 2015). The resulting interactivity within social media revolves around and centres on shared online content that a social media user can read, *like*, *dislike*, *share*, *retweet*, *upvote*, interact or engage in some kind or form with online posts or multimedia without directly interacting with the users who created or posted the shared content. The findings suggest that a social media platform *designifies* interactivity when, for example, a user engages with a post, a picture, or tweet. The online content elicits interaction since it is a target of action (repeated visits, *clicks*, *likes*, shared *tweets* and *retweets*, etc.) of other users. This observed mode of interactivity is void of direct human association and as a result communication or interaction

online is *mediated*, where user interaction is through human-to-machine-to-human. The second means in which a platform designifies interactivity is that there is no third-order dependency in the interaction between users and online content. When Nick repeatedly visits a website simply for gaming content, or Din engages with pictures and online posts on social media to keep up with friends he has lost physical contact with, the direction of interactivity is one way with no reciprocity. Yet interaction exists in these associations. A consequent effect of this nuanced mode of interactivity is that the relation between users and content heightens the perception of connectedness since online content is readily available around the clock, where it persists regardless of human actors (authors) with ease of access through various devices. This heightened connectedness to the platform and the forms of what the content represents also reduce *telepresence* since the relation emphasizes *mediated* interaction. This reduced telepresence subsequently influences how the participants interact with and perceive other users online.

Lastly, there exists no *tangible entity* that is exchanged in this process of interaction as it exists within social media. This notion of interactivity is a carry-over from traditional mass media communication, for example, the telephone (Steuer, 1992), where data (text or voice) are transmitted over a medium between two points. This designification provides insight into how social media platforms have reconfigured interaction, the need for interactivity (human-to-human, human-to-machine, and human-to-machine-to-human), and the complexity of variations that exist between interactions.

5.2 Agency: The Self and the Collective

The self as enacted within the technology of social media platforms serves and is influenced by the collective. When an individual identifies with the collective, especially when

the collective informs the way they think and act in specific situations, over time the independent agency of the individual is relinquished to the group and the group culture becomes the personal disposition (Staub, 2014). Individuals interpret situations and interactions through the perspective of the group, especially when the self is removed from the situation or context in question.

In social media spaces, the form and manner of deployment of the self is fluid and based on the context and audience. The participants demonstrated that they understand their online social spaces through the *platform-culture* established and held by the collective within these spaces. This informs and shapes the way they view and justify practices (including their own) within the platform. Also of importance is how the participants understand and experience their online social spaces as a place for experimenting with the self and growing up, and intermittently assuming a retrospective stance on their online self. The participants see their online space as a means to explore and develop their self as they do in the physical world. They acknowledge the fragility of enacting themselves online knowing that they would make judgements that are not ideal and would regret such decisions. Kelly, Wendy, and Da noted this fact as they view their actions and shared content in relation to the positive actions it generates from other users. Other participants were more cautious and claimed a restricted enactment of self and expression in their shared online activities.

5.3 Social Cognitive Awareness and Perception

Pennington (2000) referenced Storm's research into role reversal as one means of eradicating the difference in attitude for participants in an *external-observer*, *internal-observer*, and *actor* perspective. In submersing the participants to discussing cyberbullying through the use of vignettes and a case study provided an effective way to get relatively unfiltered and open

responses, as well as enabling the understanding of the different perspectives in social interaction. A key finding from this approach is that in taking on the positions of *external-observer* and *internal-bystander* in the vignettes, the participants mostly exhibited passivity and evasive attitude to the instances of antisocial behaviour. This is largely informed by their own experience and beliefs of what constitutes cyberbullying or online antisocial behaviour. In ignoring the social context, dispositional factors, and characters in the vignette, but relying solely on their *social schema* the findings contradict existing notions that in examining interaction as an *external-observer* or *internal-bystander* participants often focus on the contextual and dispositional factors in making their decisions (Beer & Ochsner, 2006; Pennington, 2000). A finding from this research is that with social media, the participants fall back on their social schema to inform this choice and not necessarily on dispositional factors. This finding is in line with research concluding that internal and external bystanders typically assume a passive stance in conflict interaction (Staub, 2012, 2014). This passivity often affirms the perpetrators of cyberbullying not only in their actions but beliefs as well (Anderson et al., 2014; Dinakar et al., 2012; Dohan & Sánchez-Jankowski, 1998; Jacobs et al., 2015; Lonigro et al., 2014). In a conflict scenario, a passive bystander can exert influence on the situation through their action or inaction in either defining the meaning of the situation and help in stopping such practices or normalising its appropriateness (Staub, 2014). However I would add that the instances depicted in the vignette were not extreme cases of abusive antisocial behaviour and that could have impacted how some of the participants responded. Another key component of this area is when immersed in the actor role, the participants ignored their *social schema* in dealing with aggression. They instead relied on the situational and dispositional context and responded to the incident differently. The reason for this difference varies. First, since the self is involved the participants

could have perceived an increased level of hostility or they could have observed the actions as being more aggressive than those depicted in the other vignettes.

5.4 Recommendation

The findings for this research have implications and significance applicable to educators and social media organisations. In this section, the implications of the research findings are first situated in education. The following section details their significance for social media platform developers and firms that focus on a call to integrating aspects of ANT into their data system design and testing. The recommendation is for usability studies that incorporate a strategy to test how humans interact with the content and how this interaction influences the way they interact with each other.

5.4.1 Implication for education

One implication is for media literacy to explore social media with recognition of the collective influence on the self. Findings of this study point to the collective, including non-humans such as platforms, having a great influence in the way and manner participants use social media. The participants understood their online social spaces in terms of a *platform-culture* and this include aspects of acceptable behaviour in such spaces as well as the way in which they represent themselves in such spaces. The collective influence was also present in the way participants acted and were assimilated, and influencing what the participants posted. Media literacy should explore and detail how students can be mindful of how predominant collective *platform-culture* online influences their understanding of these spaces.

The use of social cognition and vignettes are effective and vital to understanding teenagers and their use of social media. Educators and researchers should employ this technique

as it allowed the participants to discuss topics relating to them while at the same time providing distance and convenience for them to discuss topics quite freely. It also allowed capturing engaged response from the participants.

5.4.2 Implication for platform owners and developers

The findings of this research are timely, as recently Alphabet (the parent company of Google) announced a software project named *Perspective* AI, linked to *Conversation* AI. Currently in development and stealth mode, *Perspective* employs machine learning models to understand the impact a comment might have in social conversation. The aim of the project is to rate words based on the toxicity level they could have on a conversation (*Perspective* AI, n.d.). As users spend more time interacting with content online, platform owners and developers need to be aware of the increasing relationship and connection between users and content, since online content drives visits to the platforms. Finding of this study provide a basis for exploring users in relation to content and presence online. Platform developers need to incorporate into their usability testing how users might interact and the corresponding influences of human-to-machine-to-human interaction. Heavily content laden platforms could serve as a space that reduces telepresence and have a corresponding impact on user behaviour.

5.5 Future Work and Research Summary

Implications that hold viable prospects for future research focus specifically on social media platforms. Research of social media should account for what constitutes interactivity within differing platforms. The primary aim is not to find where interactivity intersects with social media platforms but rather to capture interactivity as it exists within the platforms. Future research should pay attention to unassuming actors and unconventional associations, as informed

by ANT (Latour, 2005). A second aspect for future research is building on instruments that measure *immersion* within social networks. While immersiveness or immersion has been explored and extensively tested within online gaming and virtual learning circles, this is not necessarily the case for SNS's such as Facebook and instant messaging apps such as WeChat or Snapchat (Wang, Petrina, & Feng, 2017). These platforms all have and share characteristics of deep immersion of users similar to online gaming and learning (e.g., spending long hours, having *presence* within the platform, experiencing reduced telepresence by interacting less directly with other users and more with the shared content, etc.). Social media platforms differs from gaming platforms in the sense that in using a platform like Facebook or WeChat, there is typically no objective of gameplay or goal (e.g., reaching the next level) to be achieved. In popular games, users explore the space as they would a physical space but this is not the case in social media platforms. A call for exploring immersion in social media is not new; it has existed for a years. The recommendation here is for empirically detailed work that could be undertaken as an iterative process, employing rapid prototyping, design, and testing through design-based research (DBR).

If we subscribe to the heralded notion that social media brings people together by affording social connections that would not have previously been possible, then the resulting interaction within these spaces may replicate or replace those of the physical world. The findings of this study indicate that this is not the case. Some of the participants reflected on experiences of connecting and sharing through mediated spaces and reported that their ability to be perceptive of human connections online were sometimes eroded. The environment and mechanism of social media platforms where interaction takes place have intensified the relation between humans and the platforms (as well as devices, etc.). Is direct human-to-human interaction eroded as a by-

product of the relation between human-to-machine interaction? The answer is yes. A consequence of this is that users tend to lack a nuanced understanding of these spaces, where actions and their consequences are different from or flow into the physical world. In social media platforms, the online self is acknowledged as a as a separate parallel entity (Turkle, 1997), and *counteractor* to the self in the physical world. Given a separate parallel state of identity, users are challenged to maintain acceptable or appropriate behaviour. The findings of this study provide helpful insights into why online antisocial behaviour and cyberbullying become pervasive and toxic.

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Appendices

Appendix A: Parent/Guardian Consent Form



THE UNIVERSITY OF BRITISH COLUMBIA | VANCOUVER

Department of Curriculum and Pedagogy

How We Learn (Media & Technology Across the Lifespan)

Investigators: The principal investigators for this study are Dr. Stephen Petrina, a professor in the Faculty of Education, who may be reached at [REDACTED], and Mr. Kesiena Chris-Iwuru, a graduate student in the Faculty of Education, who may be reached at UBC [REDACTED]. The resulting data from this research will be used for Mr. Chris-Iwuru's MA thesis: Negotiating Online Social Spaces and Virtual Environments: Examining Teen Agency, Interactivity & Social Cognition.

Study Purpose and Procedures: The objective of this study is to examine how identity is enacted within online social spaces and virtual environments, and explore the role online identity plays in social interaction within these spaces. The study also aims to explore how teenagers understand their online social spaces, perceive other online identities, and contents in relation to cyberbullying. The total time necessary to participate in the study is approximately 4 hours in total.

Confidentiality: The child's identity will be kept strictly confidential. All documents will be identified only by code. Physical hard copies will be kept in a locked filing cabinet. Electronic copies will be encrypted and protected by password. This data will be kept in the research office in the Neville Scarfe building on the UBC campus and will be accessed only by research team members.

Contact Information: If you have any questions or desire further information with respect to this study, you may contact Dr. Stephen Petrina at [REDACTED]. If you have any concerns or complaints about your rights as a research participant and/or your experiences while participating in this study, contact the Research Participant Complaint Line in the UBC Office of Research Ethics at 604-822-8598.

Consent: Your child's/ward's participation in this study is entirely voluntary and you may refuse to participate or withdraw from the study at any time. Audio and visual data will only be collected and analyzed with your assent or consent. Your signature below indicates that you give your consent for your child/ward to participate in this study, wherein audio and visual data will be collected and analyzed as part of the research study.

Parent/Guardian Signature

Date

Printed Name of the Parent/Guardian signing above

Appendix B: Guiding Questions for Initial Focus Group Interview



THE UNIVERSITY OF BRITISH COLUMBIA | VANCOUVER

Department of Curriculum and Pedagogy

Negotiating Online and Virtual Environments: Examining Teen Agency, Interactivity & Social Cognition

- Describe four of your most used social networking sites or apps?
- What attracts or influences you to use or adopt a social networking sites or apps?
- Describe or tell me a story of how or why the use of social media is important to you as a teenager?
- Are there certain social media sites or apps that you think are more popular among teenagers? Why do you think they are popular among teenagers?
- In your own words describe what you think an online identity is?
- Tell me about how you present yourself online, how do you emphasize certain parts of your identity or self online?
- Describe to me some of the features on the social networking sites or apps that you use? How do you use these features?
- How has the manner in which you interact with others and your online identity changed or evolved since you started using social media?

Appendix C: General Interview Protocol

Instructions

The following information and instructions will be adhered to for each interview sessions with participants. The start of the interview will begin with a formal introduction of the researcher and purpose of the research study. Participants will be informed of the confidentiality of information given and their rights as participants. Demographic information will be recorded and a consent form will be issued.

General Interview Protocol

The purpose of the interview is to examine how online spaces and virtual platforms reconfigure social interaction and means by which teenagers perceive and understand their online social spaces and virtual platforms in relation to cyberbullying. It also aims to examine how individuality and identity development/representation are enacted within online social spaces and virtual environment. **This research does not aim to examine the specific individual cases or personal instances of cyberbullying of the participants.** General protocols to be followed during the interview in addition to the ones listed above are as follows:

- Ensure that participants for interview are contacted and sent a reminder a day prior to interview date
- Check that recording devices are fully charged and functioning with adequate storage space. Ensure consent forms, interview questions and back up devices are ready
- The researcher will arrive ahead of schedule and allow sufficient time for setting up the necessary equipment/device (audio recorder) for recording
- The participants will be acknowledged for taking the time to participate in the study
- The participants will be informed on the time length for the interview session
- The interview will begin with a friendly conversation to build rapport with the participant and make them more comfortable during the interview
- During the interview individual, or personal detailed cases of cyberbullying will not be covered
- In the event that a participant's response leads to personal and detailed incidents of cyberbullying the interview will be steered back to questions that are related to the core research questions
- Interview date and title of the project will be stated at the beginning of recording.
- Divergent views will be explored during the interview and open questions will be used
- When necessary, questions will be revised to explore further along the line of the participant's response except when it leads to personal experience of cyberbullying
- Participants' views, perspectives or ways of thinking and expressions will not be criticized or interrupted during the interview
- Clarification will be sought if participant's viewpoint or response if it is not understood
- Participant will be informed on whether they would like to be contacted for further clarification of aspects from this interview and participate in future research

Appendix D: Sample Group Activity

Youth Perspectives on Cyberbullying and Social Media Platforms: Teen Agency, Interactivity & Social Cognition

Group Activity: Online Identity

Work as a pair or in a group of three for this exercise. Use the marker pens and the flipchart in front of you for this exercise. Task 1 exercise should take about 10-15 minutes to complete then we regroup back for Task 2 discussion.

Task 1: In the paper in front of you; list any of your most used social networking sites (SNS), apps or gaming platform. Think about aspect of your identity, the type of photos or images you share online and the nature of contents you post and any activity that you do online and write that down on the same flipchart. Associate each aspect of the identity, and online activities you wrote down with the listed social networking site, app or gaming platforms you listed.

Task 2: For this task use the visual chart you just created to respond to the following questions:

1. Describe and tell us how you present yourself online?
2. Discuss how your group members present themselves online and give your impression of them based on what they have noted down.

Appendix E: Sample Cyberbullying Case Study

(What follows is a work of fiction. Any resemblance to real people, places or situations is purely coincidental).

Scott, a Grade 9 student, transferred to a new school halfway through the semester. He quickly connected with the other students who are on Facebook and make friends with some of them at school as well.

After a while, though, Scott noticed that his friends list was shrinking as people removed him from their friends lists. He was puzzled by this at first until one of his offline friends told him that Colin, a Grade 11 student, had gotten angry at Scott because he had seen Scott talking to Linda, Colin's ex-girlfriend. Colin had begun to pressure everyone he knew to remove Scott and Linda from their friends list on Facebook and to ignore them at school as well.

One afternoon in the computer lab, Scott got angrier and angrier at Colin and his friends. Since he had finished his work for the period, he decided to start a Facebook group "Why I Hate Colin" and he invited everyone still on his friends list to join it. It turned out that there were quite a few people at the school who did not like Colin and his friends, and Scott's group grew quickly. When the message traffic on the group slowed, Scott would try to boost it by posting some shocking accusation about Colin, such as suggesting that he had cheated on Linda or that he had hit her when they were dating (Linda was not involved in the group and never said any such thing).

Soon other members of the group started to make their own accusations and suggestions about Colin, some even saying that Colin should water balloons thrown at him when he went up the main Stairway. Scott responded to that suggestion saying rock should be thrown instead

After a few weeks, one of Colin's friends discovered the group and reported it to him, Colin told his parents and they decided to report it to the principal and keep him out of school until things had been worked out, as well as to report what Scott had done to the police.

Questions for Discussion

1. Identify the aggressor in this case
2. Identify the target in this case
3. What acts of cyberbullying occurred in this case?
 - a. Describe the acts of cyberbullying and how would you rank each one?
4. Assume the role of Scott: How would you defend *Scott's* actions?
5. Assume the role of Colin: Would you consider what he did cyberbullying?
 - a. If yes, do you also consider Scott's action as cyberbullying as well? If not, explain your point

Adopted from: *A Digital Literacy Framework for Canadian Schools* (MediaSmarts, 2015)
https://mediasmarts.ca/sites/mediasmarts/files/lesson-plans/lesson_cyberbullying_law_grades7-8.pdf

Appendix F: Sample Vignettes

Vignette One

Alice is 16 years old an active social media user and very outspoken. She writes on her blog ‘Princess Thoughts’ with her real name where she writes about latest movies, music, electronic gadgets, books, pop-culture, teen fashion and celebrities. Alice regularly invites her friends from school who are on Facebook, YouTube, Instagram and WeChat to visit her blog and read her reviews/commentary.

Jane is 16 years old, also active online, very outspoken and attends the same school as Alice. Jane regularly visits Alice’s ‘Princess Thoughts’ blog and reads through Alice’s recent post on the latest movie *Zootopia*. After reading Jane leaves a comment on Alice’s blog criticizing Alice’s review of the movie and made a comment on Alice’s looks. Jane writes “...and I wonder why you call your blog Princess Thoughts as you look nothing like a princess...” Alice notices the comments, as Jane always leaves a comment on her blog, the comments are always negative and references how Alice looks.

Vignette Two

Teri is 17 years and recently discovered the app *Wishbone*—an app that lets you rate, vote or rank anything. Teri uploaded the pictures of two of her classmates (Aliya, 17 and Laura, 18) on the app and asked her school mates on social media to vote for their favourite person between Aliya and Laura.

Oliver, 17 a student in the same school as Teri, Aliya & Laura has the *Wishbone* app and took part in the voting. Teri shared/posted the result of the voting on Facebook, QQ and WeChat. Aliya received 27 votes while Laura received 3 votes. Casey 17 saw the snapshot of the results on Facebook and liked it and shared it on Instagram and on Twitter—it got retweeted 37 times.

Laura also saw the shared results on Facebook and on WeChat, she doesn’t use *Wishbone*, this is the fifth time Teri has included her in the *Wishbone* app voting and the fifth time she has lost. Laura finds out from another student at school that there is a new voting poll up this week with her picture and another student.

Questions for Discussion

1. Examine the events depicted in the two vignettes above; do you consider this a case of cyberbullying? Discuss and explain the reasons for your answer?
2. If you witnessed the incident, how do you think Alice would respond?
 - a. What advice would you give to Alice?
3. Describe how you think Laura should respond to her situation?
4. If you were in Oliver’s position, would you act the way he did? Explain your position?
 - a. What advice would you give to Laura?