THE USE OF MOBILE SOCIAL TECHNOLOGY AS TRANSITIONAL OBJECTS IMPACT ON PERSONALITY FUNCTIONING

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By

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THE USE OF MOBILE SOCIAL NETWORKING AS TRANSITIONAL OBJECTS

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ABSTRACT

THE USE OF MOBILE SOCIAL TECHNOLOGY
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by

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The purpose of this dissertation is to examine the impact unlimited connectivity and unlimited access to voice, text, and video communication as well as multimedia content consumption through mobile social technology has on personality integration. The increased use of mobile social technology has changed how the user engages social relationships. Through mobile social technology, the user places importance in an inanimate object for engagement of social relationships. A reliance on the inanimate object as a social relationship is thought to compromise the ability to internalize integrated object relations and develop stable personality organization. This theoretical research uses hermeneutic analysis of Kernberg's Object Relations theory, Winnicott's theory on Transitional Objects, Anthropomorphism, and Kohut's Self Psychology as it pertains to the relationship with mobile social technology. Through the hermeneutic process of understanding the presented experience of each of these theories the aim is to form a clearer picture of how our relationship with mobile social technology impacts personality functioning. Further research is needed to continue to expand our understanding of the impact of our relationship with social technologies. *This Dissertation is available in Open Access at AURA: Antioch University Repository and Archive, http://aura.antioch.edu and OhioLink ETD Center, http://www.ohiolink.edu/etd.*

Keywords: Social Network Site, social media, Facebook, Instagram, Twitter, Transitional Object, Anthropomorphism, technostress, Object Relations, personality, borderline personality, mobile phone, iPhone, primary process, unconscious phantasy.

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CHAPTER I: INTRODUCTION

It would be difficult to dispute the advancement of mobile technology and the pervasiveness of social media uses. This research will explore the unintended impact on the user's interpersonal relationships and intrapersonal functioning. The two largest smartphone manufacturers, Apple and Samsung, reported sales of 77 million iPhones and 76.8 million smartphones in just the fourth quarter of 2016 (Sayer, 2017). Mobile technology allows the user to stay connected while on the move. An individual can automatically receive breaking news, access up-to-date weather forecasts, send and receive emails, play internet-connected video games, listen to music or watch music videos, and stay connected to social relationships through a host of Social Networking Sites (SNS). The statistics on social media use from commonly used SNS (e.g., Facebook, Instagram, and Twitter) demonstrate high levels of information, consumption, and technology use. In the fourth quarter of 2016, Facebook reported there were 1.86 billion active monthly Facebook users (Fiegerman, 2017) sharing pictures, status updates, and links to content hosted on other websites. Meanwhile, Instagram boasted 600 million active monthly users (Sparks, 2017) sharing pictures meant to capture an in-the-moment look of the user's experience with what they are sharing. Finally, Twitter laid claim to 319 million active monthly users (Chaykowski, 2017) that shared thoughts, feelings, media, or links to content hosted on other websites so long as it was 140 characters or less. According to the World Bank (2019), the world's population in 2016 was estimated to be 7.444 billion people. Thus it is estimated that 25% of the entire world's population is active on Facebook, approximately 8% active on Instagram, and roughly 4% active on Twitter within a given month during the last three months of 2016.

In response to the increasing use of social media and other forms of technology, research has explored motivations for and the impacts of technology use. Understanding how an individual uses mobile social technology and their motivation for use is important, "…people to attribute human qualities to the phone and to think of it as having an 'electronic life' through which it unites circles of friends" (Oksman & Turtianinen, 2004, p. 336). For instance, the propensity to prescribe human emotion and motivation to nonhuman objects, known as anthropomorphism (Caporael, 1986; Luczak, Roetting, & Schmidt, 2003), is applied to technology to illustrate that behavior of the user to decrease discomfort concerning technology. Researchers have also examined user motivation; such as participating in social networking sites (SNS) for experimenting with identity and ideal self (Boyd & Ellison, 2008; Valkenburg, Shouten, & Peter, 2005) or SNS use as coping with stress or discomfort (Ellison, Steinfield, & Lampe, 2007). Additionally, researchers have examined the positive and negative outcomes from SNS use (Billieux et al., 2014; Salanova, Lloren, & Cifre, 2013; Rideout, Foehr, & Roberts, 2010; Shin & Shin, 2016) and technology use (Salanova, Lloren, & Cifre, 2013). Despite this existing base of research, further research is needed to examine users' relationship with mobile social technology. Oksman and Turtianinen (2004) explicitly identify the importance of ongoing research as new technologies and media advance, mobile phone usage increases, and younger ages are engaging in online communication.

Seemingly absent from this breadth of research is an investigation into the possible impact on personality functioning, especially the impact of unlimited connectivity and access to media stimulus on personality development and functioning. There is unlimited access to content; such as text- based messaging, SNS, media

streaming, video games, breaking news, etc… Unlimited access and constant consumption is potentially detrimental to the user. It potentially compromises the user's ability to internalize integrated objects of social relations. As the user increasingly consumes social relationships through mobile social technology and SNS engagement, there is potential for an absence of valuable real-life face-to-face feedback.

Problem Statement in Context

As previously mentioned, the mobile phone has advanced to such a degree that it has become a staple to daily life. Meanwhile, the use of SNS continues to increase (Khalaf, 2016), users are accessing SNS increasingly through mobile platforms (Khalaf & Resiraju, 2017), and usage rates are increasing dramatically in 8 to 18 year-olds (Rideout, Foehr, & Roberts, 2010). Thus, users are increasingly using an inanimate object for social connection, oftentimes without traditional gating features such as physical attractiveness, stigmatized behaviors like stuttering, or visible social anxiety or overt shyness (McKenna, Green, & Gleason, 2002), with the option of not directly engaging with the external object for social interaction. This can be problematic as the user increases use of social mobile technology to maintain interpersonal relationships, however "…face-to-face communication and online communication are not interchangeable" (Pea et al., 2012, p. 334). Instead, the user is projecting their idea (Bargh, McKenna, & Fitzsimons, 2002) of implied behavior or perceived relation based on previous posts, tweets, or pictures. This dynamic is increasingly occurring during times where successful psychological development is marked by the ability to fully internalize an object and call, when needed, on the internal object in the absence of the external object (Kernberg, 1972, 1990, 1995). An ongoing and continued reliance on an

external material object in place of interpersonal objects prevents the individual from successfully integrating the internalized object (Winnicott, 1953). Failure to successfully integrate (Kernberg, 1967, 1972, 1990, 1995) and internalize one's objects results in personality pathology (Free & Goodrich, 1985; Hooley & Wilson-Murphy, 2012).

Purpose of the Research

Continued advancements in smartphone technology allow users to remain socially connected at all times. Currently, there is an increase in the number of people who own mobile phones (Sayer, 2017), including dramatic increases in mobile phone usage for 8 to 18 year-olds (Rideout et al., 2010). As mentioned earlier, this is an age crucial to personality development. Meanwhile, research in anthropomorphic behavior demonstrated the tendency to attribute human behavior, thoughts, feelings, and motivations to inanimate objects (Caporael, 1986). As an individual engages in anthropomorphic behavior with a device used increasingly for social engagement, specifically accessing and engaging SNS, there is likely to be an impact on the internal object relations of the user. By examining research in TOs, anthropomorphic behavior of technology, SNS for experimenting with identity, technostress, and the effects of SNS use, all grounded in object relations theory. The researcher will put forth the hypothesis that maladaptive use of mobile social technology leads to a lack of stable internal object relations and compromises personality functioning. The next chapter will include a discussion of the empirical research surrounding increasing mobile phone use, types of SNS and motivation for SNS use, negative effects of SNS and technology use, primary process thinking, anthropomorphism, Object relations theory, and Winnicott's theory on Transitional objects to further develop the argument. Thus, existing research on

interpersonal relationships, research on a person's relationship with nonhuman objects; such as TO use or anthropomorphic behavior, and the potential impact on how an individual experiences these relationships and their potential impact on their functioning and mental health.

Research Question

Pulling from research that examines the social relationship of humans and their relationships with inanimate objects; this research aims to advance the understanding of the impact of unlimited access and social technology consumption. Specifically, the research question is, what is the impact relationships with mobile social technology have on integrated internalized object relations and stable personality development?

Researcher's Transference to the Topic

The researcher admittedly experiences transference to the topic as a consumer of mobile social technology and offline social relationships. Originally, it seemed like an effortless avenue to stay current with the lives of friends and family that I was not in communication with on a regular basis. To an extent it was to augment offline social connectivity with SNS. For instance, I could go about my daily life in California and family in Maryland can be informed through my posts. Or, I can virtually tag along on adventures with a friend whose career takes them all across the world. Ultimately, once we connect in person we can share our respective experiences and connect offline. However, as it does, technology continues to advance. Mobile social technology advanced to a stage where I can be online 24 hours a day, and it has become more work to feel offline. I am pulled to this topic as I increasingly feel interrupted by mobile social technology in my face-to-face relationships. I find myself, and those around me,

constantly interrupted by vibrations and various sounds set for alerts from different application sources. With the development of wearable technology, such as the iWatch, even if the actual mobile phone is out of physical reach we are literally wearing our online connection. In the absence of offline stimulus it has become second nature to pull out my phone to find or create stimulus. At times it, not only, felt like I was spending more time looking at a screen instead of the person in front of me but I was more comfortable looking at the screen. Recently, I found myself at a busy intersection during rush hour in a major metropolitan city wanting to scream "WATCH WHERE YOU ARE GOING" to the approximately 30 oncoming pedestrians that had stepped off their curb without checking for traffic, more specifically at the few that would walk straight into me as they had their gaze directly down at the phone in their hands.

Again, the idea for this research was through the researcher's personal experience with mobile social technology. The importance of this transference is two-fold: (1) from the perspective of the user posting and consuming content through mobile social channels; (2) as a participant in face-to-face social interactions that can be interrupted by others engagement in mobile social technology rather than being present in offline social dynamics. Aside from being a consumer, of Apple's iPhone and of different social networking sites, the researcher has no financial ties to any of the companies mentioned in this research.

Methods

This research is a hermeneutic examination of existing research. According to Moustakas (1994), the central focus of hermeneutics is consciousness and lived experience. Specifically, attempting to further clarify and develop a deeper understanding

of the analyzed text. To do this, the researcher pulled data from several sources: such as quarterly financial reports for mobile phones sold by the two most popular mobile phone models, active users of different social networking sites, research into types of and time spent regarding mobile phone usage, technostress and effects of technology use. Theories relevant to the topics of social relationships and inanimate objects, such as Winnicott's Transitional Objects, Kernberg's Object Relations, and Anthropomorphism, are used to analyze and make meaning of the data.

Relevance for Clinical Psychology

The new forms of mobile social technology and interconnectedness allow for variations in social relationships and blur the boundaries in these relationships. Object Relations theory emphasizes the importance of early internalized representations of primary love objects. Kernberg (1990) stated that internalization begins with the mother-child dyad and continues with the child's other relationships. The progression of internalizing the objects and integrating them into the whole internalized object is said to culminate in a stable self and integrated whole internal objects. This successful psychological development establishes safety in the self, primarily in regards to individuation and separation. Conversely, the disruption to the integration process results in psychopathology. As such, separation from connection to objects creates discomfort and symptoms congruent to the individual's pathology.

As mobile social technology continues to play a more significant role in connecting us to our social relationships, it is vital to understand the importance of social relationship's role in stable personality development and psychopathology. The dyadic social relationship is complex and riddled with challenges on its' own. The increasing

dominance of time occupied by mobile social technology is explored in this research as not just technology, yet another an object the individual is in a relationship. The constant connectivity of mobile social technology and reliance on it to connect socially takes the dyadic relationship between individuals and shifts to a relationship between the user, mobile social technology, and the intended other. For instance, someone can send a time-stamped message to another person without receiving a response. However, the sender might track the other's activity on SNS since their original message and infer any number of projected fantasies as to why they did not respond yet posted to their SNS. As this plays out, the sender can be triggered in their relationship with the other by feedback from mobile social technology rather than direct interaction with the intended target of their communication.

Human beings are social creatures and their relationships, and the role of relationships in psychopathology is an ever-present theme in clinical psychology and psychotherapy treatments. Identifying changes in the dynamics of how one is in relation to others is vital to informing treatment. The scope of understanding current themes in how one relates can inform the therapist from their approach to the client in the room to broader patterns of psychopathology present in the overall population at the time.

Definition of Terms

Anthropomorphism: Attributing of human qualities to non-human inanimate objects (Caporael, 1986). The qualities attributed can range from the non-human object experiencing or being motivated by human emotional states to complex psychological processes. Anthropomorphism occurs even in person’s awareness of the inability of the non-human objects to possess such qualities. Often the individual is aware of the inability

of the inanimate objects to possess human thoughts, feelings, or behaviors, yet anthropomorphism of the object persists (Luczak, Roetting, & Schmidt, 2003). According to Caporael (1986), anthropomorphism was initially attributed to primitive people not capable of complex cognitive process. However, anthropomorphism is thought to be a primitive psychological act rather than characteristic of the absence of complex psychological processes. It is considered primitive in that it relies on fantasy while possessing a rational awareness that inanimate objects do not possess human characteristics. Yet, the individual engages this fantasy to ease the discomfort of failed expectations of the object or the failure of the self. According to Epley, Waytz, Akalis, and Cacioppo (2008) the tendency to anthropomorphize is to meet unmet social needs; shortcomings in interpersonal social interactions can be acted out with anthropomorphized devices (Luczak, Roetting, & Schmidt, 2003). Simply stated, an anthropomorphized object becomes a social object (Caporael, 1986).

Mobile Social Technology: A portable device that can connect to a cellular network or wifi internet, which is not limited to a physical connection. Examples of mobile social technology are, but not limited to, mobile phones, tablet devices, or smartwatches.

Primary Process Thinking: According to Freud (1961) the primary process thinking is a psychological process resulting from the instinctual impulses of the id. Freud (1940) stated the primary process does not operate based on logic or rational expectation. Primary in the sense that it is the first psychological process established during psychological development.

Social Network Site (SNS): A web-based platform that provides a user a platform to create a public or private profile within the site's boundaries that allows the user to

establish a list of users they are connected with (Boyd & Ellison, 2008). The user may post or consume content to the base of connections, restricted to specific connections, or to individual connections through the specific technological features of each platform. Connections may be an individual the user has interacted with in person, someone interacted with online, or someone the user has no previous interpersonal interaction with but rather consumes the content presented to the platform.

Technostress: The stress caused by use of technology; Salanova, et al. (2013) specifically identify technostress as the negative psychological impact resulting from the expectation to use or use of information and communication technology (ICT).

Transitional Objects (TO): According to Winnicott (1953), transitional objects (TO) are objects identified, and their importance assigned, by a child as an external representation for the lack of the internalized mother object. A TO itself is neither an internal object nor an external object. Rather it is the symbolic object that acts as the connection to the mother and her role in soothing discomfort, in her absence, while maintaining the child's independence. It is this connection, and object, that allows the development of self-soothing. A TO is an object a child utilizes as an external representation for the lack of the internalized mother object (Winnicott, 1953). The TO is chosen by the child from objects made available by the mother, or attachment figure it is meant to represent. The importance is assigned by the child, not by anyone else, and subsequently only the child can decide when it no longer holds importance. A TO is utilized for soothing in the absence of not-yet-developed self-soothing capabilities during absence of the mother. Winnicott (1953) believed successful completion of TO use occurred when the developing child fully integrated self-soothing capabilities, initially provided by the

mother and TO, and thus no longer required the TO for soothing. Winnicott stressed the importance of the extinction of the TO must be of the child's motivation without outside influence. Just as the child assigned the importance to an object, to become the TO, the child must also be the one to remove the importance of the object. Winnicott stated the ability to self-soothe allowed the developing child to tolerate frustrations of unmet needs and grow through development of higher order psychological processes. Interrupted or incomplete TO use was said to manifest as regression to psychopathology during times of frustration of emotional needs. Similarly, Free and Goodrich (1985) identified increased psychopathology in patients that had TO use terminated or interrupted by someone rather than through their own decision to terminate assigned importance to the TO. Additionally, continued TO use into adolescence has shown increased psychopathology and lower reported feeling of "well-being" (Bachar, et al., 1998), increased feelings of sadness (Erkolahti, & Nyström, 2009), and even adult users with "strong attachments" to a TO are associated with disintegrated personality; specifically, Borderline Personality psychopathology (Hooley, & Wilson-Murphy, 2012).

Use Of Technology As A Transitional Object: Since Winnicott's original theory on use of TO it has been shown children have chosen a variety of TO; a pillow, blanket, stuffed animal, popular culture characters (Marsh, 2005), and even mobile phones (Ribak, 2009). The research of Bachar and colleagues (1998) showing TO use at a later age and Erkolahti and Nyström's (2009) research demonstrating strength of attachment to a TO at a later age is troubling when identifying the mobile phone as a TO as generally mobile phones are acquired beyond the age Winnicott originally identified as healthy for children to have successfully completed the use of TOs.

Given the theory of TO and the role of object relations as well as anthropomorphism in the selection of that TO, it is possible that the use of mobile phones and the SNS associated with them as a TO could have a negative effect on an individual's ability to build relationships and to develop a healthy and integrated personality.

Chapter II: Methods

Qualitative Research

Qualitative research comes in many forms spanning a variety of disciplines that attempt to understand the world and the human condition. Fields in, but not limited to, the Social Sciences, such as Psychology, Sociology, and Anthropology, utilize forms of qualitative research like observation, interviewing, ethnography, and text analysis. Although spanning multiple disciplines, qualitative research shares a "…interconnected family of terms, concepts, and assumptions..." (Denzin & Lincoln, 2008, p. 3). According to Denzin and Lincoln (2008), qualitative research means different things depending on the period of its' history. However, they offer a general definition as a guiding framework, "Qualitative research is a situated activity that locates the observer in the world. It consists of a set of interpretive, material practices that make the world visible" (p. 4). A qualitative researcher interprets a phenomenon in a natural setting with the intent to make meaning and produce a better understanding of the experience of the phenomena.

The emphasis of qualitative research focuses on qualities, processes, and meanings that are not "experimentally measured" (Denzin & Lincoln, 2008, p.14). Those that are "experimentally measured" in terms of frequency, quantity, or intensity are part of quantitative research. According to Denzin and Lincoln (2008), the qualitative researcher stresses the phenomena studied, the social constructs around the phenomena, and the relationship between researcher and phenomena. This is in contrast to quantitative research where the focus is on the measurement and analysis free from researcher influence and focused strictly on the relationship between variables studied.

Hermeneutics

The research method for this dissertation is hermeneutic textual analysis utilizing Kernberg's Object Relations theory, anthropomorphism, Winnicott's Transitional Object theory, Klein's Unconscious phantasy, and borderline psychopathology to explore the impact of mobile social technology on personality functioning and internal object relations. The hermeneutic process is an attempt to understand the process of understanding. Within this research, it is an attempt to understand the impact of a social relationship with an inanimate object by understanding personality formation and the types of relationships we have with inanimate objects. The multitude of ways in which an individual relates to inanimate objects provides an exploration to unmask a fuller picture of the impact internal object relations and personality integration.

According to Moustakas (1994), the central focus of hermeneutics is consciousness and lived experience. Specifically, a historical look back at the experience in an attempt to understand it better than those that lived the experience. Scott-Villiers (2014) highlights the entirety of history as what guides people and thus is the starting point for any understanding of human experience. For Moustakas (1994), hermeneutics is the relationship between the experience and the analysis. According to Denzin and Lincoln (2008), the hermeneutic process provides space to "…blur boundaries among researchers, participants, and audiences so that, ideally, roles reverse and participants lead researchers to new questions, audiences revert to questioning practitioners, and so forth as all interact within the text" (p.101). It is this dynamic that allows meaning to come to life. Dilthey, as referenced by Scott-Villiers (2014), stated that hermeneutics took the experience and made it whole. For it is hermeneutics that "unmask" what is

behind the objective fact, providing a fuller understanding through reflective interpretation (Moustakas, 1994). Ideally, through this unmasking, the researcher adds a functional observation that applies to everyday life. According to Van Manen (1990), this is how one intentionally participates in the world, "…the act of researching—questioning—theorizing is the intentional act of attaching ourselves to the world, to become more fully part of it, or better, to *become* the world" (pg. 5).

Hermeneutics originated as a method of biblical interpretation in the 17th century that eventually spread to the interpretation of other symbolic or obscure text (Blaikie, 2004). Friedrich Schleiermacher broadened hermeneutics beyond merely the exploration of religious text (Scott-Villiers, 2014) instead of as a method for a person to understand another person's experiences from a different culture or historical period (Blaikie, 2004). A crucial dimension to understanding identified by Schleiermacher is the psychological interpretation, to put oneself in the mind of the author of the text in hopes of knowing what the author intended (Blaikie, 2004). Schleiermacher believed, as referenced by Blaikie (2004), the outsider is in a better position for perspective to grasp the "totality". Dilthey, as referenced by Scott-Villiers (2014), found that the preexisting understanding blocked an objective method of interpretation before the method of understanding. Rather than the method creating new understanding. To reconcile this, Dilthey felt the interpreter must place himself within the historical circumstance a text was created (Blaikie, 2004). As a result, Dilthey argued that the phenomenon is composed of small individual parts in the context of the whole phenomenon (Blaikie, 2004). It is the whole that gives significance to the individual parts, and the whole is given meaning by the individual parts (Blaikie, 2004). "The dual process of discovering taken-for-granted meanings from

their externalized products, and understanding the products in terms of the meanings on which they are based, is known as the hermeneutic circle" (Blaikie, 2004, p. 455). According to Moustakas (2011), the hermeneutic circle allows one's preconceived ideas to be corrected by the phenomena which lead to new ideas. These preconceived ideas are always "at stake", according to Moustakas (2011), in the hermeneutic circle, which ultimately leads to new understandings. Heidegger disagreed stating that understanding as ontological, and in-the-moment experience that is limited by preconceived understandings or current positions (Scott-Villiers, 2014). For Heidegger, the importance is how one exists in the world, not how knowledge is established (Blaikie, 2004). In the end, Hermeneutics is the interpretation of the lived experience (Creswell & Poth, 2018). Thus hermeneutics provides the meaning of experience, which is broader than the logical words that are used to communicate.

Bracketing

As stated earlier, the hermeneutic circle understands the meaning of the individual parts derived from the whole, which itself derives its importance from the individual parts. Meaning continues to grow as the individual parts are understood in the context of the whole and vice versa. The researcher is tasked with approaching the phenomena from a blank slate, as much as is possible, by setting aside their own experiences and preconceptions (Creswell & Poth, 2018). Tufford and Newman (2012) define preconceptions as "…assumptions, values, interests, emotions and theories" (p. 81). Van Manen (1990), as referenced by Creswell and Poth (2018), identified the difficulty in this, as any interpretation of data or phenomena is based on assumptions that the researcher brings to the work. Thus, for Creswell and Poth (2018), the researcher needs to

understand their own experiences in the context of the phenomena and how those experiences might be introduced into the study.

Bracketing is a qualitative research method designed to increase the thoroughness of the research and diminish any detrimental influence of unacknowledged preconceptions (Tufford & Newman, 2012). According to Tufford and Newman (2012), bracketing not only protects the research from undue influence from the researcher but is also intended to protect the researcher from the calmative effects of studying emotionally laden phenomena. They identify one of the essential elements of bracketing involves the researcher maintaining self-awareness throughout as the researcher is the instrument of analysis in qualitative research. There are several methods of bracketing the researcher may utilize to maintain self-awareness. Memoing is a method that can range from procedural notes about the research and methods to observational notes of the researcher's feelings to the content explored Tufford & Newman, 2012). Writing memos throughout data collection and analyzation keeps the researcher actively reflecting upon their experience with the research (Cutcliffe, 2003). It is believed the acknowledgment of preconceptions allows the researcher more productive engagement with the research compared to attempts to deny or repress such preconceptions (Tufford & Newman, 2012). Another bracketing method is to be interviewed by an outside entity that maintains confidentiality. The interview intends to uncover preconceptions the researcher might not be aware of Rolls & Relf, 2006). In a way, the supportive interviewer acts as the liaison between the researcher and the data (Tufford & Newman, 2012). Finally, similar to memoing is the act of journaling. However, journaling is an ongoing narrative and

reflexive act (Tufford & Newman, 2012) kept by the researching compared to the note format of memoing.

Role of the Researcher

As stated earlier it is difficult to completely separate the researcher from the research, "A researcher's background and position will affect what they choose to investigate, the angle of investigation, the methods judged most adequate for this purpose, the findings considered most appropriate, and the framing and communication of conclusions" (Malterud, 2001, p. 483-484). To address this the researcher applied methods of bracketing in an attempt to maintain self-awareness, such as memoing and interviews with an outside entity. A consistent question considered throughout was "what role does mobile social technology play in my life?". Self-awareness of preconceptions was of importance as the researcher utilizes mobile social technology in daily life.

Data Collection

This research is a hermeneutic examination of existing theory and research spanning multiple topics relevant to the research phenomenon. The literature examined was acquired through comprehensive online databases; such as PsychINFO, EBSCOhost Psychology and Behavioral Science Collection, ProQuest Dissertation and Thesis Global, SAGE Research Methods, Electronic Journal Center (EJC), as well as books, chapters, and articles through interlibrary loan, and books purchased through amazon.com and other retailers.

Chapter III: LITERATURE REVIEW

This literature review is focused on empirical research surrounding increasing mobile phone use, types of SNS and motivation for SNS use, negative effects of SNS and technology use, primary process thinking, anthropomorphism, Object relations theory, and Winnicott's theory on Transitional objects. Mobile social technology, social content, and content consumption through mobile social technology continue to occupy more of a user's time. As mentioned in Chapter 1, it is estimated that the average user is offline, disconnected from their mobile phone, for approximately only half of each hour they are awake. In 2016 Facebook alone registered roughly a quarter of the world's population using their platform through desktop internet browsers or mobile applications. The scale of Facebook's reach and influence is considerable when consideration is paid to the populations that do not have access to Facebook, whether that restriction to access is due to age, financial, or due to technology restrictions.

However, human beings do not exist in a vacuum. There are effects on human behavior and how humans exist in relationship to each other resulting from technological advancement and technology use.

Brief Literature Overview

Mobile social technology allows an individual to remain connected throughout their day; connected to the latest news, popular culture, and with social relationships. As such, an individual can disengage reality through an inanimate object through a, perceived, social behavior. This behavior mirrors parts of other social behaviors with inanimate objects; anthropomorphism and Transitional Objects (TO). Unfortunately, anthropomorphism and TO use are thought to be primitive psychological processes, or

the primary process, compared to higher psychological processes or secondary process, aimed at soothing impulsive instinct. Overuse, and reliance, on the primary process, impacts the individual's ability to integrate the internal objects of meaningful social relationships. The lack of integrated internal objects is thought to stunt personality development and the individual's ability to tolerate distress. As such, it only feels natural to consider the habit of carrying, and regularly accessing, an inanimate social object in one's pocket throughout the day.

Increasing Mobile Phone Usage: According to Rideout, Foehr, and Roberts (2010), approximately 39% of children ages 8 to 18 years old had a mobile phone in 2005. On average, a user spent 6 hours and 21 minutes per day on their mobile phone consuming the equivalent of 8 hours and 33minutes of media content. By 2010 mobile phone usage had increased to roughly 66%, with individuals spending an average of 7 hours and 38 minutes to consuming the equivalent of 10 hours and 45 minutes of media. Americans check their SNS on average 17 times per day, according to Informate Mobile Intelligence as referenced by Chang (2015). Assuming an individual sleeps 8 hours a day, then they check their phone approximately every 57 minutes. However, the individual is consuming approximately 27 minutes of content, resulting in approximately 30 minutes per waking hour offline.

A smartphone now contains more functions than that of an older model cellular telephone. Functions of applications, such as SNS use, media consumption, or playing games rather as opposed to placing phone calls, dominates overall usage, as indicated by data usage as opposed to cellular minute usage. Thus the smartphone has integrated itself into minute-to-minute connectivity of one's life. Through voice calls, video calls, text

messaging, email, third party text messaging applications, and a plethora of SNS apps an individual theoretically can access updates in real-time to the thoughts, behaviors, and experiences of their social interests.

No longer is an individual responsible for cultivating a relationship and maintaining the internal object outside of the online or smartphone world. Instead, all that is required is to reach for a smartphone, search a person's Facebook, Instagram, Twitter, or any SNS profile, or send a convenient text or media-based message to be reminded of the person or consume their posted life. Given the increases in mobile phone usage, there is a likelihood that increasingly, relationships are based primarily online, which may result in relationship issues or social and emotional problems. The online relationship is particularly true in the case of individuals who use SNS.

Types and Usage of SNS: A few of the currently most recognizable SNS are Facebook, Instagram, and Twitter. Facebook is an SNS that people use "…to stay connected with friends and family, to discover what is going on in the world, and to share and express what matters to them" with most recent statistics listing over 1 billion active Facebook users (www.Facebook.com, 2016). Generally, Facebook users can post public status updates, comment on others' posts, or send private messages to other users.

Instagram allows users, as indicated in their company's description, "…to share your life with friends through a series of pictures… to allow you to experience moments in your friends' lives through pictures as they happen. We imagine a world more connected through photos", with Instagram reporting registering the 400 millionth member of their social network on September 22, 2015 (www.Instagram.com, 2016). Users on Instagram post pictures with comments or comment on pictures from other

users, with the "Insta" in Instagram meant to indicate the in-the-moment capture and upload of the experience captured by the picture.

Twitter describes itself as "…your window to the world. Get real-time updates about what matters to you" with a stated mission "To give everyone the power to create and share ideas and information instantly, without barrier" through 320 million active users with 80% active on mobile platforms of the application as of September 30, 2015 (www.Twitter.com, retrieved Jan. 27, 2016). Twitter users post "tweets" that are limited to 280 characters can "re-tweet" posts of other users, and comment on tweets from other users. Each of these SNS requires the user to share their lives with the social network and to engage with others by liking, commenting, or adding their pictures to what they see in other profiles. As a result, the focus is on building an online relationship, which carries the potential for negative outcomes, including social, emotional, and behavioral challenges.

Negative Effects Of SNS Use: The realm of perceived unlimited connectivity through technology and specifically, through the use of SNS, comes with a cost. One such cost is technostress. Technostress, as defined by Salanova, Lloren, and Cifre (2013), is the negative psychological impact, such as anxiety, mental fatigue, skepticism, and inefficacy, resulting from the use of or expectation to use technology; mainly information and communication technology (ICT). A form of technostress is the discontinued use of ICT due to fatigue resulting from constant use or expectation of ICT, or communication fatigue (Shin & Shin, 2016). Technostress can also lead to increased negative emotions and social and behavioral issues (Billieux et al., 2014; Rideout, Foehr, & Roberts, 2010). Rideout et al. (2010) found participants who spent the equivalent of 16 hours or more

with media expressed more feelings of sadness, boredom, lower grades (C's or worse), and reported getting into trouble more than participants who consumed less media. Other studies have found similar results, with higher media usage resulting in negative emotions as well as reduced academic achievement for high school and college students (Billieux et al., 2014) and job problems for adults (Shu, Tu, & Wang, 2011). Shin and Shin (2016) found that noncommercial messenger overload was the most influential factor in messenger fatigue on mobile devices. The authors defined messenger overload as "communication overload via mobile messaging" (p.580); the person's communication reaches a saturation point where the user ceases communication or abandons the mobile device.

Finally, use of mobile technology can result in addiction, which carries many negative outcomes, including behavioral and social problems; Salanova, Lloren, and Cifre (2013) identified the term of "technoaddiction", which they defined as the user of an ICT not feeling well due to excessive and compulsive use. The smartphone provides instant gratification through access to instant messaging, and SNS reinforcing increased smartphone use and increased checking of SNS (Lee, Chang, Lin, & Cheng, 2014). Billieux et al. (2014) examined addictive behavior in the case of mobile phone usage through a clinical case conceptualization. They identified symptoms congruent with previous research on technostress as well as increased impulsivity to engage in risky-behavior; such as dangerous driving due to mobile phone use while driving and increased financial problems.

With increases in mobile phone and SNS use, there is a concern in the negative outcomes for those who are high consumers of online applications and media. These

negative outcomes include social, emotional, and behavioral concerns that impact the individual's self, social relationships, and education and work performance outside of their online space. Such negative outcomes can result in the user disconnecting from adaptive coping of discomfort and implement a cycle of instant gratification aimed to soothe momentary discomfort.

Primary Process: Freud (1940) stated that not only was the id isolated from the external world but operated within a world of its own. As such, the demands of such instinctual wishes are not bound by logic or rational thinking. Driven by the pleasure principle, the primary process is the psychological process intimately linked to the id and the unconscious. The primary process is based on the instinctual drive of the id, which aims for instant gratification to soothe and discharge frustration of an unmet need. Unfortunately, the id and resulting primary process are not grounded in reality. However, the functions of the id and resulting primary processes are not inherently pathological (Fox, 1995). Freud (1899) stated the discharge of the id's instinctual drive via primary processes is an irrational process, perhaps even a hallucinatory process. Seeing as the primary process exists in its world and not grounded in reality, the primary process provides short-term instant gratification to the instinct rather than congruent with long-term goals and fulfillment of the ego. Finally, the primary process cannot distinguish fantasy (hallucinations) from grounded reality. When the primary process becomes the dominant process in discharging the tension created by the id's needs, and the secondary process is not activated, the primary processes become pathological and egodystonic since the ego's needs remain unfulfilled as the primary process operates from the id.

Object Relations Theory: According to McWilliams (2011), unlike Freudian psychodynamic theory object relations theorists do not emphasize botched instinctual drives, stunted developmental phases, or what ego defense was primary through the psychological developmental process. Instead, an object relation theorist emphasizes the primary love object of the child. Specifically, the focus of object relations theory is the child's internal experience with the love object; how the love object was experienced, how the love object was internalized, and how the internalized object representations manifest unconsciously in subsequent relationships of the child into adulthood.

Kernberg (1990) explains the internalization process as a buildup of intrapsychic representations of the child's dyadic relations, beginning with the mother-child object and continuing with other objects. This process is a simultaneous building of the infant's self and object representations through a progression of multiple intrapsychic self-images and object representations ideally culminating with an integrated self and integrated whole objects.

McWilliams (2011) researched important themes examining psychological development in object relations are safety and ability to exist, primarily related to the concept of individuation and separation. Similarly, Kernberg (1990) stated the triad of self-object-affect development through object relations are the determinants of the psychological structures of the id, ego, and superego. Thus, in object relations theory, the love object plays the primary role in supporting the development of relationships and experiencing a healthy association with that love object supports positive relationships throughout life.

Kernberg's Object Relations Theory

Kernberg (1990) felt five specific criteria, or stages, were the focus of his conceptualization of Object-Relations theory:

> (1) the depth and stability of internal relations with others; (2) the tolerance of ambivalence toward loved objects; (3) the capacity for tolerating guilt and separation and for the working through of depressive crises; (4) the extent to which the self-concept is integrated; and (5) the extent to which behavior patterns correspond to the self-concept (p. 59).

Further, he conceptualizes object-relations developing in stages; regardless of normal or pathological development (1972, 1995). Stage 1 is referred to as the Primary Undifferentiated Stage that occurs primarily at birth. During this stage, the individual begins the buildup of "normal, primary, undifferentiated self-object representation" (1990, pg. 60). Stage 2, or the Stage of the Primary, Undifferentiated Self-Object Representations, is where the buildup of self-object representations from stage 1 begins to be consolidated. During this stage, the pleasurable and rewarding representations built up are consolidated into the "good" self-image. Kernberg (1972) states that this development of the "good" self-image is the beginning formation of the early ego.

It is essential to note that this stage is undifferentiated, the child does not comprehend objects as separate with separate motivations from them, even though this is the beginning formation of the ego. He clarifies this through the example of the inborn behavioral patterns of a newborn; a baby's cry signals to the mother "psychophysiological imbalance and stress" (Kernberg, 1972) to which the mother responds in a manner that gratifies the needs of the baby (in healthy development). Due to the undifferentiated self-

object at this stage the early ego experiences its' imbalance as directly stimulating the mother's response, rather than the mother, as a unique individual, reading and choosing to respond to the cues of the baby. Kernberg states appropriate progression through this early undifferentiation is where the very early "individuation-separation" sub-stages begin to organize. Primarily, that through the mother's appropriate response to the baby's stress the baby begins to activate auditory, visual, and olfactory sensations promoting the beginning of the baby to develop a general awareness of their body and sensations and perceptions.

Initially, the "all good" constellation of self- and object-images are the first to develop. Similarly, the "all bad" constellations of self- and object-images begin to form as the baby experiences pain and frustrated intrapsychic states. Kernberg (1972, 1990) stresses "all good" and "all bad" structures are formed with their own unique affective experiences, there is no overlap of affect from experience existing within each structure. The "all good" image will elicit a unique attached affective experience, and the "all bad" will elicit its' unique affective experience. As such, the ego creates two separate "affective memory" structures. As stated earlier this stage contains the early formation of the ego, and although intrapsychic structures are beginning to form the ego is not yet able to distinguish the self from the love object and affective experience is primarily as pleasure or "unpleasure". However, differentiation within the "all good" constellation does occur to conclude this stage. This stage concludes with the completion of "…the self and the object components of the undifferentiated ‘good' self-object representation" (Kernberg, 1990, pg. 64).

Stage 3, Differentiation of Self- from Object-Representations, begins once the ego has completed the differentiation of the self and object within the "all good" self-object constellation. This stage is completed when a similar process occurs with the "all bad" constellation. The beginning of Stage 3 corresponds with the beginning of defining the self from the love object.

However, there does not yet exist a concept of self or concept of other human beings, rather the recognition of the self and non-self. As this defining of self from non-self occurs, it allows for the generalization of new "all good" self- and object-representations to reshape early self- and object-representations based on intrapsychic and cognitive development. The reshaping has a reciprocal relationship with differentiation as the reshaping promotes differentiation, which in turn enhances development, which reinforces the differentiation of self from non-self. After the "good" self- and object-representations have satisfactorily differentiated the self- and object-representations from the "bad" constellation begin the process of differentiation.

Core "good" diffusion lacks the complexity seen in the diffusion of core "bad". "Good" objects (self- and object-representations) lack a threat to ego due to pleasurable experiences and the correlated pleasurable affective experiences. By comparison, core "bad" objects, self- or object-representations, contain unpleasurable, through frustration or anxiety, experiences, and correlated unpleasurable affective experiences.

At this point of ego development, the experience of frustration or anxiety presents a primal annihilation threat to the ego. These unpleasurable experiences and affective experiences are engaged, initially and upon re-experience, through the use of primitive defense mechanisms in order to reduce, or avoid, unpleasure and associated threats to the

self and prevent contamination of the "good" objects. The use of defense mechanisms attempts to provide a restriction of "bad" to the ego. Thus, to allow differentiation of core "bad" to occur, the restriction must be lowered to allow the ego to unravel the root of the unpleasure and reshape it in an adaptive manner promoting appropriate differentiation.

Therefore, the complexity of the differentiation of core "bad" exists due to the very mechanisms intended to protect the ego and ideal self. As the differentiation of core "bad" progresses the need for, and use of, primitive defense mechanisms, such as splitting, decreases and the ego begins to shift away from a defensive organization (Kernberg, 1990). As the differentiation of the "good" and "bad" occur, the developing ego continues to expand and stabilize ego boundaries. Through this ego expansion and shift from a defensive organization, the beginning of the foundation to experience the depth of whole experiences and objects is forming.

Stage 4 is the "Integration of Self-Representations and Object-Representations and Development of Higher Intrapsychic Object-Relations Derived Structures". Where the differentiation of self and non-self marks stage 3, the integration of the differentiated self and objects marks Stage 4. Where differentiation in Stage 3 produced the differentiated core "good" and core "bad" self-representations and the core "good" and core "bad" object-representations the processes within stage 4 aim to integrate the core "good" and core "bad" into the whole self and whole object. By integrating polar opposite experiences and polar opposite affective experiences into a unified whole, the ego establishes stability; as it no longer exists in the polarity of the split "all good" or "all bad" representations. This integration of affect and lack of polarity reduce the affective volatility as well. The lack of affective volatility corresponds with the formation of the

self-concept, development from the differentiation of self and non-self, as the child no longer is experimenting in the world to establish the awareness of self and non-self. The more the "good" and "bad" self-images can integrate, the more stable the self-concept. Kernberg (1972) stated that the more stable and integrated the self-concept, the more likely self-perception is grounded in reality to the individual's role in interpersonal interactions and relationships.

Similarly, the behavior, or social presentation, increasingly match the self-concept as integration increases. At the same time, the corresponding process of integration of core "good" and "bad" object-representations occurs. This results in object-images that are more firmly grounded in the interpersonal reality of the individual with the actual object. The integration process of objects begins with the primary love object(s); for instance, mother, father, or parental object(s). As a result, the individual is better able to integrate other significant interpersonal relationships in their life. Kernberg (1990) identifies this point of integrated self-concept and integrated object-concept as the point of ego identity.

As the integration process increases perception grounded in interpersonal reality, it has the consequence of bringing awareness to the discrepancy of early primitive fantasy-based "all good" and "all bad" images with the now current integrated images grounded in interpersonal reality. As a result, the child's awareness of the discrepancy between the fantasized images and reality leads to the development of, what Kernberg (1972, 1990) called a new psychological structure, the ideal self. The ideal self is rooted in the previous "good" self-images based on primitive idealized fantasy, which has subsequently integrated into the whole self, which provides the ideal self-image of what

the type of person the individual wants to be. The critical difference being before integration the idealized self-images are rooted in fantasy and mostly unrealistic, where the ideal self and ideal self-images are achievable aspects of self-grounded in interpersonal reality versus primitive fantasy. A similar process occurs concurrently with the integration of object-representations, thus creating the ideal object. The overall integration resulting in ideal self and ideal object is the foundation for the ego ideal; the person the ego wishes to become based on concepts of both the ideal self and object ideal. This further integration of psychological structures and processes constitute further psychological development, away from primitive processes, toward the integrated whole.

Although the foundation of the superego begins to develop early, Kernberg (1990) states as early "bad" object images are incredibly unrealistic and sadistically hostile "bad" object images are projected and then re-introjected into "bad" self-object representations. This process aims to protect the early psychological development, and relationship(s) with idealized parental figures, from the frustration of early needs resulting in aggression towards the idealized objects and turning it against the self. Although primitive, and eventual continued non-pathological development, this internalization of parental objects coincides with the eventual role of the superego. Stage 4 contains the second notable development of the superego structure noted by Kernberg (1990). As mentioned earlier, the ego ideal is the integration of the ideal self and the ideal object. This integration was the result of development from primitive thinking based in fantasy towards thinking grounded in interpersonal reality. Subsequently, the second superego structure is the consolidation of the early unrealistic and sadistic forerunners of the superego and the more reality-based ego ideal. This consolidation of the superego structures correlates to

earlier integration processes of internalized objects already underway in the ego structure. Similar to the ego reducing the volatility from existing in polarity, the superego decreases the volatility of the early superego's unrealistically hostile and sadistic nature into a less primitive internalization of more realistic parental figures corresponding with the ideal self and ideal object of the ego ideal.

Stage 5, Consolidation of Superego and Ego integration, begins after the previously mentioned consolidation of the superego. During this stage, there is a constant process of integrating the superego and the ego. This process occurs through constant reshaping through ongoing life experiences. As the integration of the superego and ego increases, there is a decrease in the psychological conflict between the superego and ego; the development of the superego decreases the early primitive unrealistic sadistic and punitive qualities of the early superego and form a more adaptive relationship between the superego and ego. Throughout this process, the integrated self, integrated objects, and stable self-identity positively reinforced each other resulting in a lack of pathological rigidity and decreased the likelihood of retreat to primitive defense mechanisms. At this point the individual can utilize the internal object relations to increase the depth of interpersonal relationships and be utilized for love and support in moments of distress; or the ability for the intrapsychic and interpersonal to reinforce one another (Kernberg, 1990).

The individual's ability to progress through the psychological stages of development increases the likelihood of a stable foundation with a depth of internal resources to aid in tolerating stress or conflict. The depth of the object relations provides the individual avenues to re-experience love from internalized objects, ideally, resulting

in the self's ability to trust oneself in the face of stress and conflict without the regression to pathological defense mechanisms. As mentioned previously; the more stable, and integrated the psychological structures become the more the ego identity and external behavior become congruent.

Borderline Psychopathology

According to Meissner (1982), general characteristics of borderline personality include a "sense of inner emptiness", alienated lifestyle, and operating under extremely heightened sensitivity to others based on fantasy and "primitive superego" projections of the identified objects. For Meissner, the fantasy and primitive superego are held as real, while the id and ego produce feelings of mistrust towards others. As such, borderline psychopathology illustrates the lack of stable internal object relations and compromised personality functioning.

Meissner (1982) states that impulsivity and emotional lability is associated with the borderline's heightened sensitivity and primary process thinking. Disturbances within the borderline pathology produce confused and disturbed ego functioning. The disturbance in ego functioning provides the basis for rapid shifts in reality testing, triggers to the ego, and "preoccupation with idiosyncratic fantasies". The unstable ego functioning produces regressive and destructive "acting-out" behavior. These projections serve to externalize the inner conflict of emptiness or depersonalization, resulting in the individual focusing on the externalized problems rather than internal conflict. This externalized process shifts blame to outside forces and deflects responsibility away from the individual and their thoughts, feelings, and behaviors. This externalization process is important to consider in comparison to the externalization process of communicating or

posting ideas to others through mobile social technology. This regressive reaction further prevents the individual from integrating object-representations grounded in reality; instead, the individual relies on fantasy expectations, demonstrates emotional and affective lability, and fear of rejection and abandonment dominate the interpersonal dynamics. Self-destructive impulses, such as cutting, self-mutilation, or suicidal ideation or gestures, are common expressions of the emotional and affective instability of borderline psychopathology while also externalizing the internal turmoil and conflict. This creates or reinforces, the underlying victim identity within the individual. Self-destructive behaviors destroy the connection to the now hated object at the cost of the individual. According to Meissner, the victim identification and externalizing blame manifest in the individual's passivity, helplessness, and feeling out-of-control internally and within relationships. However, this only satisfies the primitive impulsive needs rather than the long-term needs of love and gratification. Adler (1985) states the Borderline psychopathology maintains a "functional insufficiency and correlative instability of introjects" in order to preserve the psychological self. "The primary sector of borderline psychopathology, that is, involves a relative developmental failure in the formation of introjects that provide to the self a function of holding-soothing security" (Adler, 1985, p. 4).

Masterson (1981, 1990) places importance on the parental unavailability during the child's maturation process resulting in the retardation of the separation-individuation needs. The emphasis is on the child's emotional experience of the unavailability, which creates the part-object introject. Masterson (1981) states this intrapsychic organization maintains the “…borderline triad: Separation-individuation leads to depression which

leads to defense" (p.133). Without appropriate separation-individuation the boundary is blurred on role of the other in relationship through mobile social technology. For Adler, this developmental failure of appropriate introjects and identifications resulting in the inability to provide self-holding and self-soothing is the primary conceptualization of borderline psychopathology. The resulting introjects formed are unpredictable and unstable; the inability to internalize the whole person rather introjects of positive quality introjects are held separately from negative quality introjects. This inadequacy and inability to self-hold or self-sooth are readily apparent as tension. The borderline psychopathology perceived a threat to self, escalates resulting in the aforementioned maladaptive functioning and regression to primitive thinking and self-destructive behaviors.

Kernberg's Theory Of Borderline Psychopathology

Kernberg's approach to Borderline pathology differs slightly from traditional Psychoanalytic theory. Kernberg (1967, 1972, 1990, 1995) views Borderline pathology from, both, a clinical diagnostic position, Borderline Personality Disorder rooted in a descriptive examination of traditional symptoms of the disorder, and a broader psychodynamic examination, borderline personality organization. Although different in theory, overlap exists in terminology between his descriptive diagnostic view of Borderline Personality Disorder and psychodynamic structural analysis of borderline personality organization. For Kernberg the Borderline Personality Disorder is the diagnosis of a specific psychiatric disorder based upon specific well-known symptoms; such as identity disturbance, unstable interpersonal relationships, chronic feelings of emptiness and boredom, chronic anger, impulsivity, and self-destructiveness. Due to the

stability of the severe psychopathology of Borderline Personality Disorder, Kernberg views it as more severe pathology compared to borderline personality organization.

For Kernberg, borderline personality organization is a broader Object-Relations view of personality organization based on the arrested development of the psychological structures (id, ego, superego) and the resulting defenses resulting in the associated symptoms. Kernberg explains the difference in severity between Borderline Personality Disorder and borderline personality organization in that all Borderline Personality Disorder has a borderline personality organization foundation, but not all borderline personality organization results in Borderline Personality Disorder (1967, 1972, 1990, 1995). Kernberg states the classical pre-psychotic personality structures are rooted in borderline personality organization: Hysterical, Narcissistic, Paranoid, Schizoid, Hypomanic, Antisocial, and "As-If" personalities. The borderline personality organization is marked by an unintegrated ego resulting from an arrest of the separation-individuation process. As a result, identity diffusion, a dependence on splitting as the primary ego defense, and the reliance on primary process functioning are common pathology within borderline personality organization. Kernberg states that due to the differences of pathology within the ego compared to less severe pathology of neuroses and the more severe pathology of psychosis, this pathology resides in a borderline area between the two.

Structural Analysis

Kernberg's (1967, 1972, 1990, 1995) structural analysis begins with the psychoanalytic view of the analysis of mental processes from the psychic structures: the ego, id, and superego. However, he (1972, 1990) considers the ego as the main psychic

structure that incorporates the other structures and their functions. Next, "…analyze the specific structural derivatives of internalized object relationships which are relevant…" (p. 22, 1995). According to Drob (2002), Kernberg believed that for a clinician to arrive at a conclusive diagnosis, the clinician must rely on the structural analysis.

According to Kernberg (1990), an individual is prone to personality regression to the last stage of development that completed sufficiently. Kernberg examined the lack of integrated personality through borderline personality organization and pathologic narcissism. For this paper, Kernberg's (1995) structural analysis of borderline personality organization is outlined below serves as an example of deintegrated personality:

1. Nonspecific Manifestations of Ego Weakness: Kernberg views the reliance on primitive defense mechanisms as the primary “specific” manifestation of ego weakness within borderline personality organization. Under the “nonspecific” manifestations of ego weakness Kernberg identifies three characteristics; a lack of anxiety tolerance, lack of impulse control, and lack of sublimity channels.

I. Lack of Anxiety Tolerance: Within borderline personality organization the inability to tolerate anxiety increases pathological symptoms and furthers regression of the ego. Due to a constant free floating anxiety present within borderline pathology it is not the amount, or severity, in anxiety experienced that is important. Rather, how the ego reacts to the load of added anxiety.

ii. Lack of Impulse Control: Here Kernberg considers the nonspecific nature of lack of impulse control, which is not to be confused with Impulse neurosis mentioned earlier. Unlike the impulse neurosis the nonspecific variety is not specific to an identified behavior or specific neurosis. The nonspecific lack of impulse control is characterized by

an unpredictability and erratic nature to the impulsivity. Kernberg states the goal her is simply to disperse intrapsychic tension created by anxiety load rather than the "dissociated identification system" (p. 23, 1995) of the impulse neurosis impulsivity.

iii. Lack of Developed Sublimatory Channels: Quite simply Kernberg is speaking to a lack of creative enjoyment or creative achievement within an appropriately stimulating environment. A lack of creative enjoyment or achievement is not considered an ego weakness when the individual is surrounded by a "…socially severely deprived environment…" (p. 23, 1995).

2. Shift Toward Primary-Process Thinking: Although individuals with borderline personality organization demonstrate secondary-process thinking during their daily life they demonstrate a reliance on primary-process thinking when faced with unstructured stimuli. The shift is primarily into the use of primitive fantasy and inability to adapt to the lack of structure. Kernberg believes the shift toward primary-process thinking is the single most important structural indication of borderline personality organization. For Kernberg, this shift is the final result of:

> (a) the reactivation of pathological, early internalized object relationships connected with primitive drive derivatives of a pathological kind; (b) the reactivation of early defensive operations, especially dissociative or splitting mechanisms affecting the integration of cognitive processes; (c) the partial refusing of primitive self and object images affecting the stability of ego boundaries; and (d) regression toward primitive cognitive structures of the ego because of nonspecific shifts in the cathexis-countercathexis equilibrium (p. 25, 1995).

3. Specific Defensive Operations at the Level of Borderline Personality Organization: Kernberg states the presence of six specific defense mechanisms as characteristic to the borderline personality organization. Of particular importance is the presence of splitting with the five other primitive defenses as pathognomonic to the borderline personality organization.

I. Splitting: As stated earlier splitting is the essential primitive defensive operation of borderline personality organization. Splitting is the active process of keeping separate the introjections and identifications of opposite qualities; the all good and the all bad. Integration of the all good and all bad into the integrated whole is a key component for ego growth and development of higher order defensive operations. However, higher order defensive operations require more countercathexis. Splitting prevents ego growth as it maintains the separation of all good and all bad introjects and identifications, thus preventing integration. This maintains ego weakness and since splitting, as a primitive defensive operation, requires less countercathexis the ego of the borderline personality organization relies on this defensive operation. This maintains a reinforcing cycle of ego weakness and splitting. For the borderline ego, the split is maintained to prevent contamination of the all good by the all bad thus preventing the ego from annihilation. Clinically, the split can be observed in the individual abruptly shifting views and feelings of another or behavior as the borderline personality organization impulses dictate.

ii. Primitive Idealization: Closely related to the previously mentioned splitting and later discussed omnipotence, primitive idealization is the viewing of an external object as completely good. Key to primitive idealization is the creation based on a primitive unrealistic object image. Much like as mentioned earlier in splitting, primitive

idealization serves to protect the all good object from contamination and destruction. This unrealistic idealization retards the development of the ego ideal and superego.

iii. Early Forms of Projection, and Especially Projective Identification: For Kernberg it is not just the presence of projection but also the manner in which it serves the ego. As previously discussed, the primitive use of splitting to maintain the all good and all bad introjects maintains ego weakness and prevents integration. The ego within borderline personality organization remains fearful of the all bad internal aggression of self and object images. The main goal of projection is to externalize the internal threat(s) to the ego. However, the consequence of externalization of aggression via primitive projective trends is that the object on which the projection is directed becomes viewed as dangerous and looking to seek revenge; which in turn the borderline personality must now defend against. Although in most of their daily life an individual with borderline personality organization has sufficient ego boundaries, the combination of ego weakness and intensity of projection overwhelm the ego boundaries in the realm of projection of aggression. Projection in borderline personality organization is characterized by a lack of differentiation of ego boundaries, especially in projection of aggression (Drob, 2001). This is demonstrated by the ability to identify themselves and the object, but the need to control the object in order to prevent retaliatory attack. In summary, the lack of differentiation is evident in the self-projecting the feared impulse onto an external object, thus continuing to experience the feared impulse, and then needing to control the external object. This distortion of aggressive impulses pathologically stunts the development of the superego.

iv. Denial: Primitive manifestation of denial is common within borderline personality organization. Kernberg states this is characterized by mutual denial, where there is awareness of different independent emotional states regarding the same trigger. Where at one point the individual felt completely different about themselves or others, yet it holds no emotional relevance to their current state. Even as the individual can cycle from one opposite perception to another, and maintain intellectual awareness of each, there is a failure to integrate the emotional states. As such, denial in borderline personality organization is said to reinforce splitting.

v. Omnipotence and Devaluation: Linked intimately to splitting, primitive idealization, and projection. As discussed earlier, idealization is the unrealistic fantasy view of the all good object as magical. This connection to the idealized object serves as protection to the dangerous and aggressive all bad. However, the omnipotence is seen in that there is no true regard for the idealized object. Rather, it is manipulated and attempted to be controlled for protection. Meanwhile, there exists a grandiose fantasy that the individual deserves special attention and privileged treatment. Devaluation is a natural consequence of omnipotence. When the external object fails to gratify needs or provide protection the split of omnipotence is manifested, the devaluation of the external object. The motivation for devaluation arises in either retaliation for failing the individual's needs or prevent the idealized object from becoming too powerful to the point of the individual fearing persecution. The constant conflict between the simultaneous need and fear of others in omnipotence and devaluation has pathological consequences on the development of the superego.

4. Pathology of Internalized Object Relationships: Sufficient differentiation of self and object images occurs within borderline personality organization permitting relatively good ego boundaries in most of daily functioning. Failure of ego boundaries typically occurs during projective identification fusion with primitive idealized objects. As stated earlier, splitting is the primary defense mechanism that maintains pathological internalized object relations. Splitting reinforces primitive defenses and ego weakness, thus preventing ego development and development of higher order defenses. This inability to integrate all good and all bad introjects and identifications is characteristic of borderline personality organization. Excessive aggression, whether primary aggression or secondary aggression, is also characteristic of borderline personality organization. As a result of excessive aggression, and split all good and all bad internalized object relations, multiple pathological consequences plague the borderline personality organization. First, there is an inability to modulate and differentiate extra anxiety and or aggressive impulses leading to sudden and intense outbursts of primitive affective states. Even depressive states produce rage and feelings of defeat as depression cannot be experienced with concern and guilt.

Lack of integration of all good and all bad introjects and identifications also interfere with the development of the superego. Early forms of the superego are rooted in the primitive all bad introjects and identifications. The lack of integration within borderline personality organization maintains the primitive superego resulting in a sadistic and punishing superego. Internalized all bad objects are projected into all bad external objects. Internalized all good objects are projected into the primitive idealized objects unrealistically based on fantasy and unmaintainable greatness. As a result, the

primitive superego of borderline personality organization is excessively demanding, sadistic, punitive, and prone to devaluation.

The results of the typical ego weakness and primitive superego are reflected in typical traits of borderline personality organization. Interpersonal relationships exist in a protective and shallow state with an inability for true empathy for others. There is a defensive effort to maintain distance from emotional involvement that would trigger the primitive identifications and idealizations. As such, unreasonable demandingness is placed on others while the borderline personality organization attempts to exploit and manipulate others, without consideration, to gratify their own needs and attempt to maintain control of the environment at all times. When this cycle fails, the borderline personality organization withdraws into fantasy to protect the weak ego from annihilation. Collectively, Kernberg acknowledges the pathology of internalized object relations as he discussed is also represented by what Erikson called "identity diffusion"; "…the lack of an integrated self-concept and an integrated and stable concept of total objects in relationship with the self" (p. 39, 1995).

Kernberg's Descriptive Analysis

Where the structural analysis is the focus for a conclusive diagnosis (Drob, 2001) the importance of the descriptive diagnosis is the ability to view personality structure on a continuum. Of particular importance is the careful, and thorough, analytic observation of the client and behaviors as an individual within this realm naturally displays fluctuation in their personality organization. Thus, Kernberg's descriptive analysis provides a framework to analyze mobile social technology behavior and personality functioning. As a result, Kernberg recognizes the possible danger in rigidly identifying pathology at a

point on the descriptive continuum. However, a well-founded descriptive analysis allows temporary placement on the continuum as Kernberg includes the structural derivatives of his structural analysis.

Individuals with borderline personality traits present with superficial symptoms. However, the existence and presentation of neurotic symptoms within the personality organization are typical to the borderline personality when compared to neurotic symptoms within an individual absent of the borderline personality. So, it is not that specific neurotic symptoms are indicative of the borderline personality. However, the presence of multiple neurotic symptom presentation observed under careful diagnostic examination often reveal a borderline personality organization.

(1) Anxiety: Anxiety is a common mood symptom in individuals with borderline personality traits. This anxiety is often chronic, not concentrated on a specific trigger, and free-floating within the individual's baseline functioning. Part of this free-floating quality is that anxiety is not bound to other symptoms except in the case of conversion into physical complaints. As previously stated, anxiety itself is not important rather when present within multiple symptoms indicative of borderline personality organization. Anxiety specifically used as a defense within therapy is not considered in this discussion (possibly due to transference neurosis or due to it as a defense strategy versus symptom).

(2) Polysymptomatic Neurosis**:** First, multiple phobias impairing social interaction with paranoid trends. Although the importance is multiple phobias, not merely one specific phobia, there is a common presence of phobias related to the individual's body and appearance, how the individual is viewed. Kernberg emphasizes that phobias create "severe social inhibitions and paranoid trends" (1967, p.647). Not of importance to

borderline personality organization are phobias related to external objects (such as animals, storms, or heights) or "transitional elements" like fear of contamination. Second, obsessive-compulsive, emphasis on hypochondriacal or paranoid thoughts, that are ego-syntonic to the borderline personality. Reality testing remains intact, and the individual recognizes the absurdity and wants to rid himself of these thoughts. However, the individual rationalizes the act, thus maintaining the thoughts and rituals. Third, Kernberg clusters "disturbances of consciousness" together; such as fugue states, hysterical reactions, dissociative reactions, and "amnesia". Fourth, Kernberg lists Hypochondriasis. Although he speaks to this more as character pathology and less symptomatic neurosis. Regardless he emphasizes the importance within the borderline personality organization. The relevance lies in the severe preoccupation with health that ultimately leads the individual to withdraw socially to focus on their symptoms and health. Lastly, they are paranoid and hypochondriacal trends. These, unlike previous constellations, are clear-cut paranoid and hypochondriacal trends that are independent and not a secondary reaction to a neurosis.

(3) Polymorphous Perverse Sexual Trends: Much like the common neurotic symptoms mentioned above the perverse sexual trends is in the presence of multiple perverse sexual trends. Excluded is the individual with a specific and stable sexual deviation, especially those with a specific stable deviation who have stable object relations. However, individuals with multiple perverse trends or bizarre forms of perversion, such as urination or defecation, necessary to achieve gratification are indicative of borderline personality. The perverse sexual trends may remain inhibited as fantasy or masturbatory fantasy or uninhibited and acted upon or acted out.

(4) “Classical” Prepsychotic Personality Structure: Either paranoid personality, schizoid, or hypomanic or cyclothymic with strong hypomanic trends intense enough to meet diagnostic criteria.

(5) Impulse Neurosis and Addictions: The pattern of impulse neurosis and addiction is such that it is chronic and repetitive that is satisfying an instinctual need. However, even though ego-dystonic when considered outside of the impulse, it is perceived as ego-syntonic and extremely pleasurable within the impulsive episode. The impulse neurosis and addiction are specific to a preferred "temporarily ego-syntonic outlet" rather than a general pattern of acting out consistent with the general lack of impulse control. Kernberg notes that alcoholism, drug addiction, and kleptomania are common impulse neurosis and addiction.

(6) “Lower Level Character Disorders”:

a. Hysterical vs Infantile Personality: Kernberg views Hysterical personality at the "higher level" of character pathology with infantile in the middle and narcissistic as low but reaching into the middle level... He speaks to the differential diagnosis between the two in six constellations; essentially as the constellations within the borderline spectrum.

i. Emotional lability: For Kernberg, the hysterical personality can maintain areas of conflict within overall nonconflictual, stable, and appropriate emotional reactions. Essentially, the emotional lability will exist within a specific relationship, usually the sexual relationship, that goes from crisis to crisis. Whereas the emotional lability within the infantile personality is more general and widespread. There are few, if any, conflict-free relationships with a greater degree of inappropriate social reactions. For the hysterical personality acting out impulses are generally demonstrated at the height of the

conflict, whereas there is a more general and impaired impulse control within the infantile personality. The infantile personality has few, if any, conflict-free relationships with a higher likelihood of socially inappropriate behavior.

ii. Over-involvment: Although each personality manifests over-involvement behavior in very similar ways, the distinction lies within the individual's internal perception of the relationship. Both personality structures will show clinging or quickly superficially over-identifying with others. Initially, the hysterical personality over-involvement behavior might appear gender or culturally appropriate; such as "feminine charm" or attempts for consistent closeness, especially romantic relationships. However, the hysterical personality will maintain the relationship within appropriate reality testing. For instance, engaging the relationship grounded in secondary-process thinking and realistic expectations of the other's internal life as well as the shared immediate reality. By contrast, the infantile personality engages the relationship through expectations not grounded in reality; such as attributing the motives of another based on a borderline personality organization fantasy and needs rather than the uniqueness of the other as an individual. The infantile personality will present as more desperate or childlike and inappropriate with unrealistic demandingness of the other.

iii. Dependent and Exhibitionist Needs: The aforementioned clinging and demandingness overlap into the dependent and exhibitionist needs constellation. For the hysterical personality, the exhibitionist needs are related to attraction and being the center of attention, resulting in sexually implicated exhibitionism behaviors but not necessarily sexual promiscuity. The infantile personality presents less sexualized and more helpless with a "cold" inappropriate demandingness typical of a primitive narcissistic quality.

iv. Pseudo-hypersexuality and Sexual Inhibition: For the hysterical personality, the trend is toward sexual provocativeness for attention but sexual inhibition in terms of acting on provocation. As stated earlier, the hysterical personality is more grounded in reality within interpersonal relationships and does possess the capacity for stability and permanence within relationships or a sexual partner. Quite the opposite, the infantile personality sexual provocativeness is crude, inappropriate, and possess demandingness of attention. Sexual promiscuity is more likely in infantile personality as there is no stability in object relations, and they tend to "drift" from partner to partner.

v. Competitiveness with Men and Women: Specific competitiveness against genders is primarily a symptom of the hysterical personality with a clearer differentiation of competitive patterns. For the infantile personality, there is a lack of differentiation in competitiveness against specific gender so much as something similar to the over-involvement and dependent constellations mentioned previously. Rather than competitiveness the infantile personality shifts between idealization and devaluation behaviors. From "submission and childlike imitation of others" to "…stubborn, pouting oppositionalism…" for attention and acceptance or fear of or actual rejection.

vi. Masochism: For Kernberg, the hysterical personality possesses a more integrated ego and superego than the infantile personality. He views the hysterical personality as a "high level" masochism versus the mid-range and "low level" masochism of the infantile personality. This is reflected in the hysterical personality demonstrating a strict and guilt-producing punitive superego, however possessing a wider range of stable and conflict-free ego functions. Contrast to this is the infantile personality, which displays an inability to form stable object relations or trust others. The less integrated

superego of the infantile personality produces less guilt and displays a mix of masochism and sadism.

b. Narcissistic Personality: Although the Narcissistic personality structure presents with its cluster of traits Kernberg views most Narcissistic personality structures presented with an underlying borderline personality organization. The Narcissistic personality emphasizes a dependency to be loved or admired, especially from those they believe to be of high status. They possess grandiose views and fantasies yet receive little fulfillment in life when there is no admiration from others. Although dependent on the superficial need for admiration from others, there is a primitive unstable internal object relation unable to trust internalized good objects. Emotionally shallow, they idolize or devalue others with no empathy in an attempt to fill their grandiose fantasies. Displaying impulse control, they will manipulate and be highly competitive, regardless of gender, in hopes to attain praise and admiration.

Increasing Mobile Phone Usage

Apple and Samsung sold approximately 153.8 million smartphones during the fourth quarter of 2016 (Sayer, 2017). When looking specifically at 8 to 18-year-olds Rideout, Foehr, and Roberts (2010) found mobile phone ownership increased from roughly 39% in 2005 to roughly 66% by 2010. However, this number drastically increases to roughly 85% of 2010 ownership in the 15 to 18-year-old demographic. Meanwhile, smartphone usage is dominated by functionality other than just making voice calls. Smartphones have the capability for voice calls, video calls, text messaging, email, messaging applications, SNS applications, gaming applications, and much more. According to Khalaf and Resiraju (2017), approximately 50% of the time spent on mobile

phones is spent on SNS, messaging, media, and entertainment consumption. Khalaf (2017) reported overall application use increased 11% from 2015 to 2016, with SNS and messaging application use increased 44%. However, the total time spent once in the application increased 394% for SNS and messaging applications from 2015 to 2016 compared to an overall average of a 69% increase in time spent in applications. Overall, total media consumption grew to approximately 146% from 2014 to 2016 (Khalaf, 2016).

Use of Social Network Sites (SNS) In Identity Development

SNS is a recent internet phenomenon. Since Facebook launched on February 4, 2004 (www.Facebook.com), new SNSs are seemingly created each year to attempt to capture market share from the dominant sites of Facebook, Instagram, or Twitter. Use of SNS has exploded over the last decade, with Facebook becoming the SNS of choice for most of the world. Boyd and Ellison (2008, p.211) define an SNS as:

> Web-based services that allow the individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system.

SNSs have "backbone" features, features that are common to SNSs; however, not all SNSs share all backbone features (Boyd & Ellison, 2008). Facebook's backbone features are that users exchange private messages, utilize an Instant Messaging feature, post public comments to other user's walls, post pictures, share links and update a "status" message. All of this information is user generated and displayed in real-time. Originally, the primary function of an SNS was not meant for "networking" or seeking new

connections, instead for managing existing social networks outside of the online presence through the use of the online self (Boyd & Ellison, 2008).

Self- presentation studies look at which "self" an internet user presents online and the differences in presentation styles based on self-esteem. Self-presentation research has shown that one is more likely to present their "true-self" more accurately over the internet compared to offline, face-to-face interactions (Bargh, McKenna, & Fitzsimons, 2002; Schlenker, Weigold, & Hallam, 1990). It is speculated that the internet adds a perception of safety and distance from rejection, whereas rejection from face-to-face interaction and resulting negative consequences are intimately experienced. Schlenker et al. (1990) found that users are more likely to disclose explicit self-evaluations when they anticipate a supportive audience regardless of the user's level of self-esteem. The difference lies in the presentation style of self-disclosure; high self-esteem users were more boastful of accomplishments, and low self-esteem users presented more acquisitive and seeking social approval from the audience. Bargh et al. (2002) found that not only are users more likely to present their accurate "true-self" over the internet but they project their valued qualities of this self on to other individuals they first meet online. This projection leads to a self-fulfilling prophecy of higher satisfaction with their interaction over the internet when compared to face-to-face meetings. The authors speculate that this is due to the lack of traditional gating features; McKenna, Green, and Gleason (2002) identified these features as physical attractiveness, stigmatized behaviors like stuttering, or visible social anxiety or overt shyness.

The social compensation hypothesis states that those with poor interpersonal skills will compensate by utilizing the internet for interpersonal relationships as a means to

experiment with identity to further develop their identity. Valkenburg, Shouten, and Peter (2005) identified three motivating factors for identity experiments on the internet: First, self- exploration involves how others react to the identity the user portrayed online. This is a conscious exploration of one's self and one's identity in a perceived, safer space when compared to face-to-face relationships. Second, social compensation is specifically learning behaviors to overcome, or compensate for, shyness. Third, social facilitation is the motivation to facilitate relationships.

Valkenburg et al. (2005) found the most significant interaction effects with age and degree of introversion. They found that the younger extroverts and older introverts were most likely to experiment with their identity on the internet. Furthermore, early adolescents are more likely to experiment with their identity with strangers where older adolescents are more likely to communicate with existing known friends and networks (Valkenburg, Shouten, & Peter, 2005).

The exploration of one's identity and expression of the "true-self" on the internet may allow the user to feel accepted by the virtual audience. Joinson (2003) speculated that as the user portrays the "true-self" online and the intended audience validates it, the user will begin to transfer the interpretations of their validated behaviors to their offline self.

Research has demonstrated that internet users feel part of a broader community. For instance, bloggers feel as if they have an audience of like-minded readers who actively seek out their material (Baker & Moore, 2008) or Facebook users view their "audience" as people with whom they share a connection (Ellison, Steinfield, & Lampe, 2007). Baker and Moore (2008) found that bloggers experience a higher level of social

integration and that their satisfaction with face-to-face interactions increased over time. They found that bloggers are more likely to seek assistance from others. Ellison, Steinfield, and Lampe (2007) found that Facebook users with low self-esteem use Facebook to overcome barriers they struggle with during face-to-face interactions.

Negative Effects of Technology Use

Technostress, initially coined by Craig Brod in 1984, as cited by Ayyagari, Grover, and Purvis (2011) is the inability to cope with stress resulting from the use of information and communication technologies (ICT). Salanova, Lloren, and Cifre (2013) explicitly defined technostress as the negative psychological impact, such as anxiety, mental fatigue, skepticism, and inefficacy, resulting from the use of or expectation to use technology; specifically, ICT. Such a psychological impact from expectation to use or use of technology is concerning as mobile social technology use continues to increase each year. Physically, technostress may manifest through increased sweating, heavier breathing, or light-headedness (Baron, 2002).

Under the umbrella term of technostress, Salanova, Lloren, and Cifre (2013) also identified the term of technoaddiction; the compulsive and excessive use of ICT resulting in the user "not feeling well" as a result of use. According to Billieux et al. (2014) the common impairments of technoaddiction are problematic overuse, sleep disturbances, financial problems, and dangerous use (such as usage while driving). Specific problematic behavior identified from their case conceptualization were irrational beliefs about oneself, dependent attachment behavior manifested through mobile phone, low impulse control in regards to tolerating uncomfortable emotions, ruminating negative

thoughts with excessive worry, and reassurance behavior through the use of the mobile phone in an attempt to regulate mood.

According to Shu, Tu, and Wang (2011) ICTs have become so integrated into daily life the boundary between personal life and work is blurred; while simultaneously being faced with the unlimited availability of exponentially more information. Ayyagari, Grover, and Purvis (2011) found that role ambiguity is a strong predictor of technostress due to individuals' struggle to adaptively manage the burden of constant interruption and competing demands leading to the feeling of overwhelm and helplessness. Meanwhile, employees that have a high dependence on technology report increased levels of technostress (Shu, Tu, & Wang, 2011). Similarly, Brooks (2015) found increased technology use is consistent with an increase in technostress, as well as higher levels of technostress results in lower levels of reported happiness.

According to Lee, Chang, Lin, and Cheng (2014), the smartphone's access to social communication and SNS provides the instant gratification that reinforces the user to check their smartphone more frequently. They found as compulsive mobile phone use increases, so do technostress. As mentioned previously, an increase in dependence on technology increases technostress (Shu, Tu, & Wang, 2011). Brooks (2015) found an increase in social media use leads to increased levels of technostress, and increased social media use resulted in lower levels of happiness.

Negative Effects of SNS Use

Hundreds of millions of people worldwide are utilizing mobile social technology that rapidly changes how they interact with each other (Zhong, Hardin, & Sun, 2011). However, "…face-to-face communication and online communication are not

interchangeable" (Pea et al., 2012, p. 334). The constant connection to technology was found to lead to an increase in media multitasking, the simultaneous use of multiple technologies, which was associated with negative emotional outcomes; such as "…feeling less social success, not feeling normal, having more friends whom parents perceive as bad influences, and sleeping less" (Pea et al., 2012, p. 334). Kim, LaRose, and Peng (2009) found an increase in negative emotional outcomes leads the user to further rely on their preferred online activity as a means of escape further increasing the user's sense of loneliness. Sheldon, Abad, and Hinsch (2011) found that feeling disconnected leads to an increase in Facebook as a coping strategy with the subsequent feeling of connection acting as a reward for such use. This is congruent with findings by Correa, Hinsley, and Gil de Zúñiga (2010) that higher levels of negative emotional outcomes predict increased social media use. This feedback cycle is problematic as Blackwell, Leaman, Tramposch, Osborne, and Liss (2017) found evidence of attachment anxiety, avoidance, and fear of missing out correlated with SNS addiction.

Similarly, individuals that are not comfortable with cognitively challenging tasks were found more comfortable with SNS communication and demonstrated increased SNS use (Zhong, Hardin, & Sun, 2011). Conversely, individuals that are stimulated by cognitively challenging tasks demonstrated less SNS use (Zhong, Hardin, & Sun, 2011). According to Sheldon, Abad, and Hinsch (2011), SNS use can have negative emotional outcomes concurrently with positive emotional outcomes, as users report Facebook to use leads to increased feelings of social relatedness with no decrease of feelings of loneliness or feeling disconnected. Sheldon, Abad, and Hinsch (2011) found even termination of Facebook use still produced positive emotional outcomes with concurrent negative

emotional outcomes, "…reduced aggression, procrastination, and negative affect, and with increased life-satisfaction, but it was also associated with reduced positive affect" (p. 773). Conversely, Pea et al. (2012) found an inverse association between face-to-face communication and media multitasking resulting in more positive emotional outcomes with increased face-to-face communication. Thus, even technology designed to promote social interaction produces unhealthy emotional outcomes (Pea et al., 2012).

Anthropomorphism

Anthropomorphism is the tendency for an individual to assign human characteristics to inanimate nonhuman objects (Caporael, 1986). Anthropomorphism is categorized as a primitive psychological process. It operates from fantasy while the individual is rationally aware the nonhuman object is, in fact, not human and does not possess the ability for human emotion or human behavior. Most empirical investigations in anthropomorphism addresses that it occurs and the broad range of variability that exists in anthropomorphic behavior (Epley, Waytz, & Cacioppo, 2007) rather than the role it plays concerning others. For instance, anthropomorphic behavior has been attributed to a computer-animated blob based on movement speed (Morewedge, Preston, & Wegner, 2007), consumer product brands anthroponophized (Aggarwal & McGill, 2012), children tend to engage in anthropomorphic behavior more frequently than adults, particular nonhuman objects are anthropomorphized more often than others, and certain cultures value anthropomorphic explanations more (Epley et al., 2007). Regardless of age, gender, or culture anthropomorphic behavior is social behavior; the anthropomorphized object is used as a social object (Caporael, 1986) and the anthropomorphized object is seen as a useful social object when the individual perceives

a lack of social connection to humans (Epley, Waytz, Akalis, & Cacioppo, 2008; Epley et al., 2007). This is an important consideration when analyzing the relationship between an individual and an object used for social connection: mobile social technology. Anthropomorphic behavior, Epley et al. (2007) state, is a result of several psychological determinants acting and interacting within the individual. A psychological determinant is a psychological process, or condition, that activates knowledge or behavior. They identified three psychological determinants specific to anthropomorphic behavior: "elicited agent knowledge" (p. 868), "effectance motivation" (p. 871), and "sociality motivation" (p. 875). It is these psychological determinants, they state, that explain the variability of anthropomorphic behavior; such as cultural, developmental, or situational variance.

Epley et al. (2007) explain that elicited agent knowledge is rooted in the individual's egocentric knowledge as the base for inductive reasoning of anthropomorphic behavior. That is, humans only have knowledge of being human and the human experience. For instance, when an individual witness another's behavior, mirror neurons activate as if the perceiver is the one performing the behavior (Rizzolatti & Craighero, 2004). For Epley et al. (2007) this automatic neurological process allows the individual to project their mental state to understand something they witness, "Although most full-grown adults develop the ability to recognize that others have unique mental states of their own, they do not appear to outgrow their childish ways altogether" (p. 868). That is, one's own experience is immediately accessible in attempting to understand something external. Without sufficient motivation or the cognitive capacity to correct this automatic egocentric process, the egocentric bias in judging other's behavior increases

(Epley, Keysar, Van Boven, & Gilovich, 2004). This pattern of egocentric perspective is reinforced and more prevalent in individualistic cultures versus collectivistic cultures (Wu & Keysar, 2007).

When applied to a nonhuman object, the egocentric simulation uses the person's own experience as the basis for judging the nonhuman object's performance. For Epley et al. (2007) this is the basis for influencing the activation and tendency to the application of anthropomorphic behavior of nonhuman objects. Conversely, the capacity for and motivation to utilize non-egocentric abstraction would decrease the activation and tendency to anthropomorphize nonhuman objects.

The crucial second determinant for anthropomorphic behavior identified by Epley et al. (2007) is effectance motivation. In anthropomorphic behavior Epley et al. (2007) identify effectance motivation as "…the motivation to interact effectively with nonhuman agents (or perceived agents) and operates in the service of enhancing one's ability to explain complex stimuli in the present and to predict the behavior of these stimuli in the future" (p. 866). They state through effectance motivation anthropomorphism is used to create meaning, comprehension, and predictability in an uncertain environment. The authors identify two major factors influencing effectance motivation in anthropomorphism. First, anthropomorphism increases in the presence of uncertainty around the behavior of a nonhuman object, "…such as with natural phenomena attributed to religious agents" (p. 872). The second major factor influencing effectance motivation is an incentive to predict or understand the behavior of the nonhuman object accurately. This incentive may be related to the expectation of future interaction or perceived influence on the individual's well-being. Anthropomorphism provides an instinctual and

immediate process for increasing perceived predictability and decreasing uncertainty in contexts where non-anthropomorphic processes do not exist or fail to reduce uncertainty.

Finally, a social motivation which is defined as the motivation for creation and maintenance of social connection is an innate human need, ubiquitous throughout time and cultures, and results in maladaptive psychological development and poor physical health when not sufficiently fulfilled is the crucial third determinant as presented by Epley et al. (2007). The experience of pain from social, or lack of social, relationships leads an individual to seek relief from that pain similar to attempts to alleviate physical pain. This social motivation is essential for anthropomorphism as the need is, to an extent, satisfied by creating anthropomorphized connections to everyday non-human objects; like pets or religious figures (i.e., God). The authors suggest that social motivation even increases anthropomorphic behavior. Social motivation reinforces a propensity to search for human characteristics and traits. When this search fails to materialize a human social connection, the individual alleviates the pain from this failure by projecting the searched for human traits into anthropomorphized non-human objects, thus artificially creating the social connection. This provides a sense of presence through interconnectivity, as examined in online interaction, soothing the need for social connection (Ahn & Bailenson, 2011). However, Epley et al. (2007) state that this increase is specific to anthropomorphic behavior to social connection, not anthropomorphic behavior in general.

Transitional Object

According to Winnicott (1953), a TO begins as transitional phenomena. The infant first begins with repetitive sounds, a mannerism, or thumb sucking as a defense

against depressive anxiety triggered by the absence of the mother, or breast. The use of a repetitive sound, tune, or song falls into the category of transitional phenomena as the transitional phenomena are not attached to a specific external object. Once an external object provides soothing capabilities, initially learned from soothing with transitional phenomena, that object becomes the transitional object. The TO is an object chosen, and assigned importance, by the child as the external representation of the mother. As a transitional object, only that specific item can provide soothing capabilities, and a similar substitute would not suffice. Initially, the TO soothes the child in times of emotional discomfort when the mother is not available, and the child has not yet developed an internalized object of the mother, to provide soothing. It is the beginning of the child remaining connected to the mother while simultaneously experiencing their independence. The TO aids in psychological growth and allows the growing child to expand their coping of emotional discomfort beyond the transitional object through the development of self-soothing. Also, only the infant decides when the transitional object will no longer meet their soothing needs. Continuity of the transitional object is vital, attempts to clean or change the object may ruin its' value to the infant. In times of "deprivation", or higher than normal emotional distress or discomfort, patterns related to or need of the transitional object may reappear.

Winnicott (1953) states successful growth is when the TO is "decathected", the transitional object itself no longer has the primary cathartic impact. Thus, the child has allowed it to lose its' meaning and "…the transitional phenomena have become diffused, have become spread out over the whole intermediate territory between 'inner psychic reality' and 'the external world as perceived by two persons in common', that is to say,

over the whole cultural field" (Winnicott, pg. 91, 1953). In essence, there is diffusion from the transitional object to the child's other interests; play, art, religion, sports, or school. Winnicott (1953) states:

> By this definition an infant's babbling or the way an older child goes over a repertory of songs and tunes while preparing for sleep come within the intermediate area as transitional phenomena, along with the use made of objects that are not part of the infant's body yet are not fully recognized as belonging to external reality. (p. 89)

The critical distinction between transitional phenomena and transitional objects is the recognition of the object as a separate external object rather than something from within the individual. Winnicott (1953) states that the transitional object exists in the infant's internal and external reality combining to form the overall perceived experience of soothing. Adults use reality testing, according to Winnicott, to separate internal and external reality. However, as the infant is much earlier in psychological development, the mastery of transitional phenomena and transitional objects are key to further psychological growth. For Winnicott (1953), the infant's progression through the transitional object is how the infant learns about life outside of itself. The transitional object is the first "not-me" possession, and it helps the infant remain connected to the mother after the initial separation from the mother. As stated earlier, the transitional object is the external object of the first object-relation, which is an internal relationship. The existence of the good enough internal object-relations allows for the transitional object to occur and provide soothing in the absence of the actual relationship. "The transitional object may therefore stand for the 'external' breast, but indirectly, through

standing for an 'internal' breast" (Winnicott, 1953, pg. 94). Winnicott notes that consistent failure on the part of the actual individual from which the object-relation internalization formed will eventually lead to failure of the transitional object as well. Eventually, the transitional object becomes meaningless.

Use of Technology As A Transitional Object

Recall, Winnicott's (1953) theory demonstrated how the TO is utilized through fantasy in a relational/social manner, ideally promoting the child's ability for separation and individuation. Knafo (2015) proposes the way individuals express their identity and act on social desires is changing due to the "technological avalanche", or technology progressing faster than the human ability to fully understand each technological advance, that increasingly blurs the boundary between human and machine. As a result of the blurred human and machine boundary, Knafo (2015) states that technology aims to satisfy more social and emotional needs in addition to practical needs; while always connected through the internet. Oksman and Turtiainen (2004) state that mobile communications have expanded the home beyond the physical home with internet-based communication a vital part of the daily culture of young people. According to Levy-Warren (2012), the internet feeds instant gratification that increasingly blurs fantasy and reality. As technology is increasingly used to meet social and emotional needs, taking the place of or representing a human object, it acts as a transitional object operating through fantasy in daily life.

Grounded in Winnicott's Object Relations theory, Ribak (2009) examined mobile phone use as a TO within the "parent-child-mobile phone triangle" in Israeli families. Much like Winnicott's original identification of the TO to remain connected to the

mother, or breast, to allow the infant to grow into a separate individual eventually. Ribak suggests that mobile phones allow a similar separation and individuation process to occur. Specifically, healthy separation and individuation require sufficient trust and safety. Ribak states the mobile phone allows the mother, or parents, to allow the increasingly more physical distance between them and the child as the mobile phone provides the link, in this instance an actual line of communication, back to the mother. "…The mobile phone is important less as a means for actually communicating particular information, and more as an object that encapsulates the potential for communication" (pg. 193, 2009).

For Ribak (2009), the mobile phone exists within the space of the internal and external reality of the child. However, Ribak acknowledges contrary to Winnicott's original theory, the mobile phone as TO occurs past Winnicott's termination age, where the child progresses past transitional objects. As such, Ribak suggests the child does not grow out of this transitional object. Instead, one grows out of a phone model and replaces it with new models as they come to market.

Problematic Transitional Object Use

In his theory on TO, Winnicott (1953), stated that healthy day-to-day TO use was completed approximately around age 7 years old and only returned during times of maximum stress thereafter. For Winnicott (1953), the ability for the child to establish a TO represented experiencing the “good enough” mother for which the TO is a representation. However, TO can become problematic if established at later ages, relied upon for too long, or never established. “How easy to project one’s wishes and fantasies onto an object when nothing pushes back” (Knafo, 2015, p. 496) which, as Lemma

(2014) states, has the ability to shatter the external and internal worlds when relied upon without successful integration. Unsuccessful TO development, unsuccessful TO graduation or problematic TO use prevents successful integrated object relations and personality development.

When looking at age of TO use Bachar, Canetti, Galilee-Weisstub, Kaplan-DeNour, & Shalev (1998) found evidence supporting these ideas of Winnicott's theory. Bachar and colleagues (1998) specifically found participants who endorsed healthy TO use as children reported receiving significantly higher maternal care and bonding. Conversely, the authors found children and adolescents using transitional objects beyond the age of 7 reported significantly higher experienced psychiatric symptoms and reported feeling lower overall general well-being.

Other researchers have examined the use of transitional objects into adolescence or the inability to graduate from TO use. For example, Erkolahti and Nyström (2009) found higher levels of sadness in adolescent transitional object users compared to non-users. Erkolahti and Nyström (2009) hypothesized children that experience problems during development into adolescence are likely to continue use of a transitional object into adolescence. Free and Goodrich (1985) found participants in their psychopathology group, those demonstrating psychopathology requiring psychiatric hospitalization, reported significantly higher disrupted or terminated (by someone other than the user) TO use than the participants in the non-psychiatrically hospitalized group. Of particular importance in their study, Free and Goodrich (1985) found if the TO was first established in adolescence there was a significant correspondence with psychopathology. Similarly, Hooley and Wilson-Murphy (2012) conclude adults that report strong attachments to TOs

are associated with Borderline psychopathology. Hooley and Wilson-Murphy (2012) emphasize the intensity of attachment to TOs and frequency of use as key in their findings. Similarly, the psychopathology group for Free and Goodrich (1985) also showed higher adolescent and adult TO usage rates in their psychopathology group compared to their normal group.

Unconscious Phantasy

According to Klein, as stated by Hinshelwood (1991), unconscious phantasy underlies all mental processes. In fact, unconscious phantasy exists before spoken language (Bohleber, Jiménez, Scarfone, Varvin, & Zysman, 2015) and unconscious phantasy is the mental representation of physical sensations (Hinshelwood, 1991). These physical sensations; such as movements, feelings, or sensations, are interpreted as the result of being in relationships with objects (Bohleber et al., 2015; Hinshelwood, 1991). For Klein, these sensations were not isolated events but rather the dynamic processes lived and "…it is the very medium through which we engage with the world, inner and outer (Bell, 2017, p. 790). This mental representation of the engagement between an individual's inner and outer world is exemplified by the use of mobile social technology to call upon real or imagined social relationships. Projection and introjection are some of the earliest psychological processes, which are considered to be the mental equivalent as breathing is to the physical body (Bell, 2017). As such, Klein found that once inhibition was removed from unconscious phantasy it subsequently produced more phantasy (Bell, 2017; Hinshelwood, 1991). According to Bell (2017), for Klein unconscious phantasies "…have real effects upon mind, its contents and the way those contents are structured" (p. 790). For instance, since unconscious phantasy is associated with somatic events the

use of projection and introjection can manipulate physical sensations to stimulate new phantasy when unconscious phantasy is used as a defense mechanism (Hinshelwood, 1991). As the infant develops phantasy, he moves from solely connected to physical sensation and shifts to symbolic objects (Hinshelwood, 1991). However, activation of primitive phantasy will still produce a somatic experience; such as anxiety "…as butterflies in the stomach, or sadness as a lump in the throat" (Hinshelwood, 1991, p. 36). As such, phantasy feels like reality for the infant with real effects, in a way phantasy is omnipotent (Hinshelwood, 1991).

Primary Process Thinking

The primary process is the psychological process guided by the pleasure principle intimately linked to the id and the unconscious. The pleasure principle aims to maximize pleasure while minimizing pain (Freud, 1961). As such, anything that may elicit pain is restricted from the secondary process. This is based on the instinctual drive of the id. The id aims for instant gratification to soothe and discharge the frustration of an unmet need. According to Freud, two mechanisms of the primary process are responsible for soothing and discharging frustration: 1) consolidation of visual images; and 2) the displacement of psychic energy.

However, the primary process is not grounded in reality. "Freud's primary process contains freely mobile energy that reflects the instinctual wish and has little regard for reality" (Modell, 2014, p. 813). According to Yigael (2005), the primary process lacks any sign of reality as it is unable to distinguish between internal and external images. The inability to distinguish between internal and external images poses a problem when engaging relationships through mobile social technology functions that do

not involve direct feedback from the relationship dynamic. Thus, for Freud (1940), the id operated within a world of its own. The discharge of the id's instinctual drive via primary processes is irrational to the point of even being a hallucinatory process (Freud, 1899). Logic or rational thought does not dictate the primary process. This lack of grounding in reality through rational thought in the primary process allows short term instant gratification when only the primary process is utilized without progressing through the secondary process. This short term instant gratification would appear to mirror the instant gratification feedback loop provided by posting SNS content and receiving "likes" and comments. Such a feedback loop can be problematic when the primary process becomes the dominant process in discharging the tension created by the id's needs, and the secondary process is not activated, the primary processes becomes pathological and egodystonic since the ego's needs remain unfulfilled as the primary process operates from the impulsive perception without any identity of rational thought (Grogan, 2015).

Kohut Idealized Parent Imago

For Kohut (1977) an infant is blissfully unaware the primary caregiver is separate from the infant. Initially, this is maintained by the caregiver being highly attuned to the infant's needs. However, the maintenance of such a level of attunement is bound for failure due to the "…inevitability of limitations in parenting, this undisturbed primary narcissistic equilibrium in the child is disturbed" (Son, 2006, p. 86). As a result of this inevitable failure, the infant splits the narcissistic perfection into two components in their mind (Smith, 2015). The first system is the narcissistic, or grandiose, self (Kohut, 1966, 1977). For Kohut (1966), the infant attempts to protect itself from this failure, and future failure, by the build-up of perfection. As such, the unpleasant, frustration, or bad is

outside of the self. The narcissistic self "…expects the confirmation and admiration of such grandiosity from the parent or care-giver" (Son, 2006, p. 86). Such constant confirmation and admiration is not unlike the "like" feature on the various SNSs. As regardless of tone of content posted it is "liked" as there is no ability to dislike a post unless it is directly addressed in a comment.

According to Kohut (1966, 1977), this process unfolds from the infant's frustrated needs as a result of the primary caregiver's failure to satisfy the infant's needs. However, the infant still desires to not only be in contact with their primary caregiver but to return to the blissful state. As a result, the second narcissistic system is the attribution of power and perfection on the primary caregiver. Kohut (1966, 1977) referred to this power and perfection projected to the primary caregiver as idealized parent imago. The idealized parent imago is to provide a sense of security and soothing as the infant expects the idealized parent imago to remain in relationship with the infant (Son, 2006). According to Son (2006), the infant establishes their perfection, the primary caregiver's perfection, but that the infant is still part of the primary caregiver. For Smith (2015), this is "…a quintessentially interpersonal context" (p. 302).

The two narcissistic systems create poles for the infant's rudimentary sense of self. For Kohut (1977), self cohesion was maintained by the tension created between these two poles. The narcissistic self "…fosters self-assertive goals, purposes, and ambitions…" (Son, 2006) p. 86) which desires empathic response and attention from the idealized parent imago. According to Smith (2015), the narcissistic self desires the primary caregiver to validate the perfect infant but also the caregiver to be idealized as an omnipotent other available for the infant to merge with. The ambiguity with SNSs

features presents potential conflict with validation of perfection; such as a “like” for a post containing unpleasant content or not achieving a certain number of “likes”. The successful dynamic relationship between the narcissistic self and idealized parent imago leads to the development and internalization of the infant’s skills and development of a basic sense of self cohesion.

The Extended Mind

In their seminal work on the theory of the extended mind, Clark and Chalmers (1998) propose that one’s skull and skin do not serve as the final boundary to the mind. Instead, “We advocate a very different sort of externalism: an active externalism, based on the active role of the environment in driving cognitive processes” (Clark & Chalmers, 1998, p. 7). For Clark and Chalmers (1998) the key distinction for the externalism they speak to is the active role, versus passive externalism studied before them, of the external environment or external system. According to Barr, Pennycook, Stolz, and Fugelsang (2015) the extended mind is an external object, such as a smartphone accessing the internet, serving as an extension of the cognitive system performing cognitive tasks that would otherwise be performed within the individual’s internal mind. Thinking is offloaded to technology, the smartphone acts as external memory, playing the role of storage and retrieval of information (Barr, Pennycook, Stolz, & Fugelsang, 2015). Similarly, Sparrow, Liu, and Wegner (2011) demonstrated people not only use the internet as external memory but think of it as such as well.

Chapter IV: DISCUSSION

Everyday technology plays a more significant role in our daily life compared to previous decades. Initially, adults dominated technology use with only a handful of devices trickling down to teenagers. No longer does a device have a single function nor a clearly defined role, as the iconic Sony Walkman did with portable music after its release in 1979 (Franzen, 2014). Current smartphones are not designed just to make and receive telephone calls. Now, the average smartphone sends and receives a text and e-mail messages, is the user's main camera, provides updates on the weather, provides breaking news notifications, is a mobile gaming system, streams television shows, movies, and live events, connects to social networks, and still has considerably more functions. As such, it is not surprising to see users engaging with mobile social technology to soothe interpersonal discomfort and engage social relationships. Khalaf and Resiraju (2017) found that approximately 50% of the time spent on smartphones is engaging in functions other than making phone calls. Of significance is a 394% increase in time spent on SNS and messaging application use, compared to a 69% increase for the use of other applications (Khalaf,2016). However, a concern is that the inanimate object holds the importance rather than the face-to-face experience of those social relationships.

The term "smartphone" is, to a certain extent, downplaying its importance because it is not *just a phone*. We have everything in the palm of our hands, ready to be accessed at will, primarily dependent on battery life and the availability of a cellular data or Wi-Fi connection. It is not uncommon to see a toddler holding a smartphone or tablet device, such as an iPad, to watch cartoons, play games, or even take pictures.

Furthermore, it is not out of the ordinary to see a crying or fussy toddler or child be soothed by receiving a smartphone or tablet device. According to Turkle (2015), "passback" is parental slang for the act of handing a phone to soothe a fussy toddler in the back seat.

In addition to filling the roles of multiple devices, users are interacting with smartphones at younger ages. A study in 2010 reported smartphone ownership in children eight to eighteen-years-old in 2005 increased from approximately 39% to 66% and approximately 85% of teenagers, specifically between the ages of fifteen to eighteen (Foehr & Roberts, 2010). Studies such as Foehrs and Roberts (2010) indicate that children today grow with, or are even born into technology, rather than receiving an introduction to technology at more mature ages. Thus, at a time crucial to emotional and social development, the child's attention is consumed by mobile social technology diminishing the attention available for face-to-face relationships.

A Perceived Connection

Before mobile smartphone usage, adults demonstrated an ability to engage in primitive psychological processes during times of stress and anxiety while using inanimate objects. An example of a primitive psychological process is anthropomorphic behavior. Anthropomorphic behavior is the tendency for an individual to assign human characteristics to inanimate objects (Caporael, 1986). Previous research has shown anthropomorphic behavior utilized across a wide range of inanimate objects, such as to computer-animated objects (Morewedge, Preston, & Wegner, 2007) or consumer products (Aggarwal & McGill, 2012) such as cars or computers. Individuals use anthropomorphic behavior to soothe anxiety by creating meaning that the user can make

sense of, often triggered by a failure to comprehend or understand the performance or lack of performance of the engaged inanimate object. For instance, someone lacking a technical understanding of mobile smartphone performance and connectivity may attribute their phone's slow performance to the phone being "lazy". However, the phone does not possess motivation nor levels of motivation impacted by mood. On the other hand, the user does use motivation to justify behavior and this correlation, based on their own experience, may be sufficient to soothe or minimize the user's frustrations or anxieties resulting from the device's lack of optimal performance. Similarly, to a transitional object (TO), an anthropomorphized object is an effective social object in the absence of perceived social connection (Epley, Waytz, Akalis, & Cacioppo, 2008; Epley et al., 2007). The use of an inanimate object as a perceived social connection demonstrates how someone can utilize primitive psychological process with a social object as a means to soothe discomfort.

Although not anthropomorphic behavior, individuals have engaged in social relationships through the use of technology to soothe discomfort while experimenting with their identity. A key component in utilizing the internet for identity experimentation is the lack of gating features such as physical attractiveness, stuttering, visible social anxiety, or overt shyness (McKenna, Green, & Gleason, 2002). The authors found that a lack of gating features provided decreased intimacy and the perception of distance, providing psychological safety from rejection. Also, when engaging in self-presentation identity experimentation, the user seeks out a supportive and like-minded audience. (Schlenker et al., 1990). Early research indicated this leads to an increased likelihood of the user presenting a more accurate "true-self" identity online to launch offline for face-

to-face feedback (Bargh, McKenna, & Fitzsimons, 2002; Schlenker, Weigold, & Hallam, 1990). This was not the case with offline face-to-face interactions without previous online experimentation. The critical distinction for successful identity experimentation was first experimenting with identity online, then continuing the experimentation with face-to-face interaction. The more intimate nature of face-to-face socializing provides crucial feedback for fine-tuning identity and working towards psychologically integrating one's identity. The use of online identity experiments with current mobile social technology patterns is concerning for two reasons: the increase in mobile social technology use and the increase in time spent within these mobile social applications on smartphones keep the user online and away from face-to-face socialization.

On the surface, it may seem that messaging and Social Networking Sites (SNS) applications are for social purposes or staying in contact with friends and family. However, regardless of age, research indicates that SNS provide a way to explore one's identity; "Virtual space is a place to explore self" (Turkle, 2015, pg. 6). Meanwhile, the creators of these social networks, at least according to Facebook founding President Sean Parker, looked to exploit this tendency to explore one's identity and reinforce the user to spend as much time as possible interacting on Facebook. Parker candidly spoke about Facebook's initial intentions and his growing discomfort during a public event:

> The thought process that went into building these applications, Facebook being the first of them, ... was all about: How do we consume as much of your time and conscious attention as possible?…It's a social-validation feedback loop ... exploiting a vulnerability in human psychology…The inventors, creators…understood this consciously. And we did it anyway. (Allen, 2017)

According to Parker, their motivation in exploiting an identified “vulnerability in human psychology” was not only to increase the user’s time spent on Facebook, but to increase the amount of content the user contributes. Each time a user receives a “like” or “comment” on a picture or post, it acts as a positive reinforcement to post more content to receive more “likes” and “comments”. Again, Parker speaks to Facebook’s aim to capture the user’s time and attention and the company's desire for that user to produce continuous content. The “social-validation feedback loop” Parker references provides instant gratification to impulsive needs to continuously accumulate more “likes” and “comments”.

No longer is this process played out on a desktop computer at the user’s brick and mortar place of internet connectivity. Upon leaving the computer, the user was disconnected from the perceived safety and was required to engage in face-to-face interactions with conscious attention to the spectrum of thoughts and feelings elicited by such interactions. Now, the mobile phone offers constant connectivity to escape this discomfort. The user no longer disconnects from safety to implement their identity while receiving face-to-face feedback, ideally leading to critical thinking and self-reflection. Sean Parker disclosed quite the opposite, in that Facebook intends to keep the user online by feeding their need for instant gratification (Allen, 2017). If the face-to-face interaction is not to the user’s liking, they can present the content with a filter or angle to increase the likelihood of receiving “likes” and “comments” in the online interaction rather than attending to the face-to-face interaction.

To an extent, a mobile smartphone now represents something akin to Winnicott’s TO since it has become something a user can gravitate towards to soothe their intra- and

interpersonal anxieties (Winnicott, 1953). However, as Winnicott described, the TO is utilized for soothing in the absence of the human object it represents. The goal is for the user to graduate from the TO and develop the ability to self-soothe. Conversely, the mobile smartphone has become an object that the user does not graduate from and, instead the user grows to utilize more and more of its features. Users, instead, grow out of their smartphone model once it has become "outdated," and upgrades to the newer model with updated and even more immersive functionalities. For Winnicott (1953), the TO does not shift from one inanimate object to others, nor can a substitute fill in when the TO is unavailable. The role of the mobile smartphone as a TO is modified from the traditional sense of the phrase because the category of technology labeled as a mobile smartphone maintains importance overall and not a specific mobile smartphone currently in possession by the user.

As of 2019, two of the highest-selling mobile smartphones on the market are the Apple iPhone and the Samsung Galaxy. There exists a significant amount of brand loyalty within the mobile smartphone community; an iPhone user only upgrading to newer iPhone models or Samsung users upgrading with newer Samsung models. Whether the user emphasizes having a connected mobile smartphone or if they emphasize a specific brand of smartphone, it is the user that has assigned importance to their mobile smartphone and the maintenance of its importance, congruent with Winnicott's original theory. With the upgrading process, the user does not graduate from the TO since the user is not utilizing higher-order psychological processes to self-soothing. Instead, the user remains in contact with the mobile smartphone and continues to place tremendous value in it in daily life.

Primitive Psychological Process of Mobile SNS

Putting this into context, individuals will project human behavior and motivation on nonhuman objects, utilize nonhuman objects to represent human objects in their absence, and experiment with developing one's identity through the internet and SNSs to avoid discomfort in face-to-face interaction. To an extent, these behaviors are considered by the user to be social behavior in the absence of perceived social connection. Creating content for SNS consumption distracts from the in-the-moment social connection as the focus is delivering content for social media compared to the feedback experienced from a social connection at the moment. This type of use appears to create a glaring disconnect from face-to-face relationships. Through this process, the individual is utilizing an inanimate object as a social connection to access false representations of actual social relationships. As time spent within applications on smartphones increases, crucial face-to-face interaction competes for attention with the mobile smartphone. In an attempt to be more social, the individual becomes reliant on the mobile smartphone and SNSs to be connected to those who they are in relationships with, rather than connecting offline without the use of SNS as a buffer to connection. This behavior creates an infinite loop of projecting human behavior and feelings onto inanimate objects as social behavior.

The inanimate object acts as a TO to connect to interpersonal relationships through SNSs in identity development appears to rely on a tremendous amount of primary process thinking. Recall, the primary process is a psychological process dictated by the pleasure principle and heavily influenced by the impulse-driven id. The primary process is irrational and lacks grounding in reality to the point of being hallucinatory. There is a heavy reliance on fantasy images and thinking to provide instant gratification,

thus maximizing pleasure and minimizing pain, in an attempt to soothe the discomfort of unmet needs. However, the primary process aims to soothe only the discomfort of unmet needs rather than soothing by working towards actual need fulfillment, not fantasy fulfillment, or working toward tolerating discomfort until a suitable time the unmet need can be attended to and processed through the secondary process. Rather than intimately connecting to someone face-to-face or recalling a differentiated internal object, there can be a fantasy of connection in the palm of one's hand. This complex dynamic of attempting to be connected to others primarily through anthropomorphized transitional objects is a primitive psychological process that disrupts personality functioning.

To decode this convoluted method of socialization and the subsequent impact on personality functioning, one must revisit how critical interpersonal relationships impact our personality functioning. Kernberg (1990) recognized the importance of the intersection of instinct and social connections on personality, "…internalized object relations may be considered a crossroad where instinct and the social system meet and contribute crucially to the development of the personality of the individual" (p. 59). Kernberg (1990) lists five specific criteria as the focus of his Object Relations theory:

> (1) The depth and stability of internal relations with others; (2) the tolerance of ambivalence toward loved objects; (3) the capacity for tolerating guilt and separation and for the working through of depressive crises; (4) the extent to which the self-concept is integrated; and (5) the extent to which behavior patterns correspond to the self-concept (p. 59).

These criteria can be used to illustrate the impact of mobile social technology as a TO for social connections via SNSs. According to Winnicott (1953), successful TO use is

utilized at a time when the toddler is in an undifferentiated state, thus lacking internal object relations and unable to tolerate discomfort and separation from loved objects during frustration of unmet needs. Successful completion of TO use occurs once the toddler has "decathected" the TO. Successful completion provides the toddler with the capability for self-soothing and tolerating individuation and separation. For Winnicott (1953), successful TO use is the first experience of life existing outside of one's psychic reality and that everything is "not-me". Thus, continued use of a TO to consistently access social connections conflicts with Kernberg's (1990) criteria for internalized object relations. This smartphone SNS dynamic prevents the fulfillment of Kernberg's (1990) for internalized object relations.

In theory, a TO, mobile social technology, and SNS are each tools to increase social connection. Though different, the symptoms of problematic usage from each of these theories share a striking similarity. Primarily, there is a baseline inability to cope with stress, due to absence of the love object for TO use (Winnicott, 1953), or due to expectation to use (Salanova, Lloren, & Cifre, 2013), or use of technology leading to overall decreased mood (Ayyagari, Grover, & Purvis, 2011). Increased technology use leading to increased technostress resulted in users reported lower levels of happiness (Brooks, 2015) parallels problematic TO users reported feeling overall lower general well-being (Bachar et al., 1998) and higher levels of sadness (Erkolahti & Nyström, 2009). This is where the vulnerability referenced by Facebook founding President, Sean Parker, comes into play. Parker specifically referenced that each "like" or "comment" is meant to provide instant gratification to reinforce the user to post and encourage the user to consume more within the SNS. Lee, Chang, Lin, and Cheng (2014) confirmed access

to SNS provided instant gratification leading to the user checking their mobile phone and SNS more frequently, which lead to an increase in technostress. As mobile social technology and SNS act as the TO to soothe unmet social needs, it does so through the primary process, which reinforces the cycle of attempts to soothe discomfort by utilizing the TO. This cycle ultimately maintains discomfort. Thus, it is not just the mere presence of the constellation of symptoms that stands out but rather the relationship between the user, TO, and symptoms.

It is due to the relationship between the individual and object concerning the identified constellation of symptoms that appears relevant to apply Kernberg's Object Relations Theory. Of particular importance is Kernberg's view, as stated by Drob (2002), of the dangers of rigidly adhering to personality diagnosis instead emphasizing personality organization reflective of the development of the psychological structures. As such, personality organization would reflect the point of arrested development at a particular stage. Kernberg stated an unintegrated ego due to arrested development during separation-individuation results in borderline personality organization, such as hysterical, narcissistic, paranoid, schizoid, hypomanic, antisocial, and "as-if" personalities. The developmental arrest during separation-individuation is significant concerning TOs, as Winnicott (1953) stated the TO is the first "not-me" object that allows the infant to work through the separation-individuation process. Thus, for Kernberg, according to Drob (2002), an accurate borderline personality organization conceptualization relies on utilizing the structural analysis.

Application of Kernberg's Structural Derivatives

As discussed in the prior chapter, Kernberg focused on the psychological structures and identified four structural derivatives common in borderline personality organization: (1) nonspecific manifestations of ego weakness (2) shift toward primary process thinking (3) specific defensive operations at the level of borderline personality organization (4) pathology of internalized object relations.

Kernberg stated those with borderline personality organization experience constant free-flowing anxiety. Concerning nonspecific ego weakness, it is not the amount or severity of anxiety but rather the lack of tolerance to additional anxiety. The lack of tolerance produces erratic acting out behavior representative of the lack of impulse control. Thus, decisions and hobbies are impulsive or self-destructive, rather than with genuine personal fulfillment or achievement in mind. To this extent, there is an absence of developed sublimatory channels as there is no creative enjoyment.

The relationship between free-floating anxiety intolerant of additional anxiety loading producing impulsive behavior correlates with the relationship with mobile social technology and SNSs. As previously mentioned, not only is mobile phone ownership increasing, but overall mobile phone usage is increasing, specifically for functions other than voice calls. Usage increases stand out as Khalaf and Resiraju (2017) reported that SNS use, messaging, and entertainment comprises 50% of mobile phone usage. Khalaf (2017) noted the rapidly increasing time spent, 394% increase, for SNS and messaging compared to the 69% increase for time spent on all application use from 2014 to 2016. Recall, Sean Parker, stated Facebook's, and any SNS as he understood, goal was to monopolize the user's time and attention through exploiting psychological vulnerabilities.

Thus, mobile social technology and SNS relationship to the user is not a quality, intimate social connection but one centered on quantity of content. The saying “Doing it for the ‘Gram” highlights this relationship, where the user is behaving for a picture to post on Instagram (or other SNSs) to generate “likes” or become “insta-famous” rather than for personal enjoyment or genuine achievement outside of pure social validation. However, as mobile phone use and SNS use increases, so does technostress and conversely lowers levels of happiness and well-being. Unable to tolerate the discomfort of technostress, the user impulsively begins the cycle again by momentarily being soothed by the instant gratification of checking the mobile phone for new content.

For Kernberg (1995), the shift to primary process thinking to soothe anxiety triggered by unstructured stimuli is the essential structural derivative indicative of borderline personality organization. The retreat into primary process thinking, such as primitive fantasy, is due to the inability to cope with anxiety due to lack of structure. The primary process offers momentary soothing where the secondary process is what works to increase distress tolerance and increase long term psychological growth. Mobile social technology and SNS use is nothing but unstructured. Text posts and comments lack traditional gating features such as physical attractiveness, body language, tone of voice, rate of speech, or stigmatized behaviors, that provide context to communication that impacts how a user might accept or reject someone. A picture or video posted captures in a moment is posted and viewed without the audience knowing the full context. Meanwhile, this content is created and posted with a fantasy of how it looks and how it will be received. Bargh et al. (2002) noted that due to the lack of gating features found in

face-to-face communication, the user relies on projection when interacting with other users.

Kernberg (1972, 1990) identified projection, along with splitting, idealization, denial, and omnipotence, and devaluation belongs to a cluster of primitive defensive operations as important in the identification of borderline personality organization. The role of these primitive defensive operations, much like that of primary process thinking, is to avoid threats to the ego presented by psychological conflict and the experience of additional anxiety (Drob, 2002). The reliance on these primitive defenses is at the expense of psychological growth. The lack of structure in online interactions increases the use of primitive psychological processes and defensive operations, such as: the shift to primary process thinking (Kernberg, 1995), idealizing the intended other and projecting desired qualities onto them (Bargh et al., 2002), or using technology for instant gratification and soothing (Lee, Chang, Lin, & Cheng, 2014) of discomfort triggered by role ambiguity (Ayyagari, Grover, & Purvis, 2011) or lack of work and personal technology use boundaries (Shu, Tu, & Wang, 2011). All the while these behaviors are ego-dystonic and might soothe anxiety at the moment but contribute to increased feelings of overwhelm, unhappiness, and anxiety (Ayyagari, Grover, & Purvis, 2011; Billieux et al., 2014; Brooks, 2015; Salanova, Lloren, & Cifre, 2013).

The reliance on primitive psychological processes and primitive defensive operations prevent ego development and development of secondary psychological processes, leading to compromised internal object relations. The individual has not integrated all good or all bad introjects into the whole object. This lack of integration has the individual utilizing fantasy, primitive psychological processes, concerning the all

good or all bad objects. The individual is not engaging the individual grounded in reality. Additionally, the motivation for SNS usage is to avoid discomfort rather than connecting to the individual. The individual utilizes the fantasy introject needed at that moment to soothe discomfort from additional anxiety load and perceived lack of connection. To decrease discomfort, SNS usage increases as each post, like, comment, or message provides instant gratification to soothe discomfort, though only momentarily. As the individual engages SNS, they are utilizing it for content creation or content consumption. The user is projecting their beliefs into the comments and messages they receive or the content they are viewing. As noted by Klein, projection and introjection are two of the earliest psychological processes (Bell, 2017). Once activated, the use of unconscious phantasy as a defense produces more phantasy (Bell, 2017; Hinshelwood, 1991). During times of increased stress, projections manifest as aggression projected onto the other and in an attempt to control and manipulate the situation as phantasy feels like reality and is omnipotent (Hinshelwood, 1991). This externalization of bad internal object relations is congruent to Kernberg's (1995) borderline personality organization. The borderline personality organization does not see an individual for who they are in grounded reality, but a means to an end that can be manipulated in attempts to control their feelings and environment. This behavior comes at the expense of intimate interpersonal engagement grounded in reality, and how that content reflects what they know of the other through their offline social interactions. This is seen in mobile social technology usage where the individual will impulsively reach for their device to soothe discomfort from being alone without stimulation or perceived social connection. Each attempt at new content is driven to increase likes, comments, and messages to soothe the fragile ego rather than genuine

connection with others. Engagement of mobile social technology and SNS through primitive psychological processes and primitive defensive operations maintains emotional distance and prevents emotional involvement from interpersonal relationships grounded in reality. These fantasy relationships act as protective to the shallow ego preventing ego development and integration of internal object relations.

Kernberg's Impact on Personality Functioning

Following Kernberg's theory on personality development, the reliance on primary process thinking and lack of integration would correspond to an Incomplete Stage 3, which is characterized by a lack of complete differentiation of self and non-self, the all good is differentiated but all bad is not. Stress from an all bad introject is not viewed as a separate individual with separate feelings and motivations. Instead, viewed through primitive psychological processes of the user to project on the other. The use of primitive psychological processes and defensive mechanisms maintain a "defensive organization" (Kernberg, 1990). As noted above, mobile social technology and SNS dynamically act as a TO, which is a primitive psychological process motivated to soothe discomfort. The defensive organization prevents further psychological growth and differentiation and eventual integration. Complicating matters is the decrease in intimate face-to-face communication needed to work through object relations. As a result, the ego maintains poor boundaries. These poor boundaries Facebook, as stated by Facebook's founding President, aimed to exploit. These psychological vulnerabilities, as Parker called them, are particularly threatened during stress and anxiety. Primitive psychological processes and primitive defense mechanisms become increasingly relied upon within this stunted stage of psychological development. According to Kernberg (1990), the reliance on

primitive defense mechanisms is typical of borderline personality organization, which is the typical pathology of an incomplete Stage 3. For comparison's sake, higher-level defense mechanisms and non-borderline neurosis are typical in Stage 4.

Conclusion

"And what I've found is that our little devices, those little devices in our pockets, are so psychologically powerful that they don't only change what we do, they change who we are" (Turkle, 2012). This research paper explored the relationship between user and their mobile social technology and found the reliance in using mobile social technology as a transitional object (TO) to access online social relationships reinforces primitive psychological processes and stunts development of a stable personality. Furthermore, that smartphones and mobile SNS are treated by users as if there is a social relationship between user and technology. In this relationship, the actual person on the other side of the technology loses priority to the technology itself. The feedback received from the mobile social technology and SNS relationship; feedback appears to resonate with the impulsive primary process, similarly to that of the toddler that is overly reliant on the TO without developing higher psychological processes. This type of feedback loop inhibits personality integration, or possibly de-integrates personality functioning as the user continuously utilizes, and responds to, primary psychological processes. Turkle (2012) succinctly identified that we are in quite the predicament as we have set ourselves up for trouble in relating to each other and relating to ourselves.

Unfortunately, only a small amount of research is available at this time on the user's social relationship with mobile smartphone technology and SNS. The role of this work is to broach our relationship with smartphones and SNS. An explicit limitation of

this paper is that this is a theoretical examination of a social relationship between a user of mobile smartphone technology and SNS and the potential impact on personality functioning. To this extent, the purpose of this research paper is exploratory and an initial step. However, technology advances faster than consumers can fully understand and appreciate. It is of equal importance that we continue to look at our relationship with technology and the boundaries needed to maintain more adaptive use.

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