

Institute for Clinical Social Work

THE RELATIONSHIP BETWEEN
FACEBOOK USE
AND
DISORDERS OF THE SELF

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By

SUZANNE BLAISING

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ABSTRACT

With the advent of social networking sites, the face-to-face interactions and social life of many Facebook users have been impacted by online interactions. This study explores the connection between the use of Facebook and narcissism levels in 18 to 29-year-olds. Using quantitative methodology, 123 participants, 68 male and 55 female ranging in age from 18 to 29 were randomly selected and administered an online survey. The data from this study shows that Facebook use has a tendency to become habitual or integrated into the daily habits of its users. These respondents increasingly used Facebook as a means to communicate, share, show, seek attention, and to connect with others. The results from this study suggest the longer one is on Facebook the more deeply embedded it becomes in one's life. These online interactions do not supply the necessary ingredients for healthy self-development. The findings were further explored by age group. Particular attention was given to those within the 18 to 21-year-old age group, who at the time were 13 to 16-year-old adolescents when Facebook became part of their social life. Those in this group use Facebook most frequently and use it as a means to gain status and attention.

I wonder how many people I've looked at all my life and never seen.
~*John Steinbeck*

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LIST OF ABBREVIATIONS

DSM Diagnostic and Statistical Manual of the Mental Health Professions

NPI Narcissistic Personality Inventory

CHAPTER 1

INTRODUCTION

The purpose of this study is to explore the impact of social network use on the developing self in young adults. There is a new generation of American youth between 18 to 29 years of age referred to as “Millennials” (Howe & Strauss, 2007). These American teens and twenty-somethings now making the passage into adulthood. By some accounts, young adult Americans spend more time on social network sites than any other single online activity (Hampton, Goulet, Rainie & Purcell, 2011). Ninety-four percent of young social media users have a Facebook profile, and 81% of those users said that Facebook is the social networking site they use most often (James, 2013). It is reported that almost half of the 18 to 34-year-olds today check Facebook minutes after waking up and 28% do so before getting out of bed (Hampton et al., 2011).

Millennials have rapidly adopted social networking sites such as Facebook, enabling new opportunities for the presentation of the self, learning and the construction of a wide circle of relationships (Hampton et al., 2011). Yet, with these opportunities there are also concerns that the use of Facebook may have an effect on the development of the self amongst the Millennial Generation. The theoretical framework of self psychology will be the primary theory through which to understand this development.

Erik Erikson's (1980) work on identity formation will also be utilized. If it is true that young adults achieve a sense of self via relationships to others, then their participation in a virtual world becomes critical for the clinical social work community to understand. Even for members of this generation whose selfobject needs have been adequately met within families, there are still challenges during adolescence. For example, further maturation depends on the development of peer relationships that provide continued mirroring, idealizing and twinship opportunities. Facebook communication does not provide the necessary ingredients for healthy self-development, as it does not take place in person or face-to-face (Stern, 1985). The mirror or contingent immediate response from others to affirm one's self is missing through Facebook relating (Kohut, 1984). Because there is no interactive need regulation, its user is caught in a relationship without reaction, contingency and solution.

In the next section important concepts in development and self psychology are summarized in order to understand the impact of Facebook on the development of the self and, more specifically, on narcissism.

CHAPTER II

LITERATURE REVIEW

Theoretical Perspectives

Social networks exist because humans are societal and require relationships with other humans in order to survive. This need to bond emotionally with others was documented as far back as 1958 in Harlow's famous study of infant rhesus monkeys and wire mothers (Rosenblum, 1973). Social networks are critical to the psychological well-being of humans; this has been well documented throughout the years. Dornes (2002) in a review of infant research found that infants make a distinction between human beings and objects operating like human beings. They react in a different way to a smiling human mouth than to a box formed like a mouth. These results point to the fact that these expectations are structured toward fulfillment in a human relationship. They represent a "social need" (Dornes, 2002). There is an existential need for a social answer inherent in them (Ermann, 2004).

The fundamental need to establish contact and connection has adaptive roots in biological survival (Bowlby, 1980). Attachment is an innate behavioral system; it is a form of instinctive behavior that has evolved in the service of the survival of the species (Bowlby, 1980). Bowlby believed intimate attachments to other human beings are the

hub around which a person's life evolves, not only when he is an infant, a toddler or a school child, but throughout his adolescence, his years of maturity, and into old age (Bowlby, 1980).

Developmental psychologist Braten (1998) assumes that a potential readiness for interaction is inherent in the infant but has to be filled by actual experience in order for its contents to be defined. He calls this readiness the internal "virtual other" with whom the infant is already in contact before he enters into actual interaction experiences. Braten (1998) did research in order to illustrate the credibility of his hypothesis. In his "still face" experiments the mother faces her baby silently and with a motionless facial expression. In the "perturbation" experiments the adult reacts to the baby after a certain interval, so that the reaction does not match the action of the infant any more. In both cases, the baby reacts to the discrepancy between his own action, e.g. a smile, and the reaction of the other, e.g. the nonappearance of a suitable answer. He reacts with unrest and finally withdraws from communication. He starts to act on his own and breaks off the contact (Braten, 1998). Developmental researchers also found: "Face-to-face interactions, emerging at approximately 2 months of age, are highly arousing, affect laden, short interpersonal events that expose the infants to high levels of cognitive and social information. To regulate the high positive arousal, mothers and infants synchronize the intensity of their affective behavior within lags of split seconds" (Feldman, Greenbaum, & Yirmia, 1999, p. 223). These experiments indicate the need for communication as well as the expectation for an emotional reaction or response to one's communication (Ermann, 2004). According to Stern, one's emotional development is dependent not only upon affect attunement which is the matching of affect states between

people but also necessitates “interaffectivity” the affect or emotional response by an other to emotional communication (Stern, 1985). These dyadic experiences of “affect synchrony” develop as a consequence of each partner’s learning the rhythmic structure of the other and modifying his or her behavior to fit that structure (Schoore, 2002). If the interpersonal environment is unresponsive to the infant’s needs, it causes the infant to withdraw or dissociate and pathological self-development ensues (Glassman, 1988).

Self-Psychology

It is important to understand the theoretical perspective through which the information from this study will be viewed. Self-psychology, developed by Heinz Kohut (1984), is widely accepted today as one of the central psychoanalytic theories (Siegel, 1996). It is a comprehensive theory consisting of both a developmental model and a model for clinical consultation and therapy (Banai, 2005).

Kohut’s interest in Freud’s tripartite model facilitated his thinking about narcissism. Through the analysis of his adult patients, Kohut began to formulate the narcissistic configurations. He presented a reevaluation of the concept of narcissism by stating that narcissism is neither pathological nor undesirable, but is part of the human experience (Kohut, 1966). Kohut regarded narcissism as a normal developmental phenomenon, which provides a sense of identity, value, meaning and permanence (Palombo, 2006). The narcissistic line of development is active from the beginning of life and is a precondition for adequate personality functioning (Kohut, 1966). The integration of narcissism into the healthy personality represented a radical departure from a worldview that saw narcissism in pejorative terms (Siegel, 1996).

In Kohut's self psychology the self is not present at birth but emerges beginning in infancy through relationship with a caregiver (Cohler, 1990). The heart of self psychology is the self, the core of the personality. The self is conceptualized as a mental system that organizes a person's subjective experience in relation to a set of developmental needs (Goldberg, 1988). It includes the skills, talents, deficits, and temperament with which a person is endowed at birth. The self is the essence of a person's psychological being and consists of sensations, feelings, thoughts and attitudes toward oneself and the world (Banai, 2005).

A person's sense of self develops and is sustained through their selfobject experiences (Kohut, 1984). The concept "selfobject," was introduced by Kohut to describe an aspect of, specifically a function in the relationship between self and others. From birth on, Kohut contends, we need to feel intimately connected to others and to feel that they are reliably available to provide the emotional nutrients necessary for optimal development. What we need from others and how we need others to be responsive to us change over the life span (Goldberg, 1984).

In Kohut's (1982) theory of the self, empathy is a mode of observation and the medium through which the mirroring, idealizing, and twinship selfobject functions are provided. With the experience of empathy one grows to develop a sense of self cohesion. Kohut (1982) writes:

Empathy, the recognition of the self in the other, is an indispensable tool of observation, without which vast areas of human life, including man's behavior in the social field, remain unintelligible. Empathy, the expansion of the self to include the other, constitutes a powerful psychological bond between individuals. And, empathy is a psychosocial nutriment without which human life as we know and cherish it could not be sustained (p. 705).

The emotionally attuned and empathic caregiver provides selfobject functions that meet the child's need for affirmation, admiration and connection to others. These functions consist of mirroring, idealization, and twinship (Kohut, 1977).

Mirroring is part of the development of the grandiose self in which parental response to the child builds self-esteem and reinforces the child's sense of self (Kohut, 1977). Idealization is characterized by a yearning for an omnipotent object to which one can attach in an effort to feel whole, safe and firm (Seigel, 2000) and twinship, the need for an other who inspires a feeling of similarity (Kohut, 1977). According to Kohut selfobject needs are fundamental to the human experience and are essential for self cohesion (1977), the development of a cohesive self takes place along three axes: (a) the grandiosity axis, (b) the idealization axis, and (c) the alter ego to connectedness axis:

The grandiose self or mirroring selfobject: The functions associated with the grandiose self include the experiences of being affirmed and acknowledged by another who mirrors one's internal state. The result is a sense of worth, positive self-regard, and experiences of being respected and feeling approved of by others who praises and compliments us in an authentic way. Some of these experiences lead the person to feel a sense of dignity and self-respect. Experiences of admiration and of feeling lovable result in the sense of poise, self-confidence, and self-assurance. Those of being cheered on in the pursuit of novel experiences and encouraged in the mastery of challenges that stretch one's reach, lead to a sense of firmness in the sense of self, and enhance the assertive pursuit of activities (Kohut 1968, 1978, 1971, (p. 489; pp. 26-28).

The idealized parent imago or idealization: The functions associated with the idealized parent imago include the experiences of safety that results from the faith in the strength and omnipotence of someone who acts as a protector. Sharing in the strength of that person and feeling protected results in the function of feeling empowered and effective as a human being. The experience of having one's excitement or over stimulating feelings modulated by another, result in the functions of self-control, self-discipline, and self-regulation. The experiences of being soothed, comforted, and calmed by another, who provides solace and support as well as joyous vitality, result in the capacity for enthusiasm and equanimity. Finally, the experience of learning rules of conduct that represent the content of the culture's values and ideals, become consolidated into a value system, and a set of ideals that serve as guides in the person's life. These give a

sense of purpose in the pursuit of life's goals (Kohut 1968, 1978, 1984, pp. 479-481; pp. 37-49).

The alter-ego or connectedness: The alter-ego selfobject functions were initially associated with the mirror transferences, being considered an archaic form of those transferences, but were later given a separate status (Kohut, 1984)(p. 193.) The functions associated with the alter-ego include the experience of a common bond with others that unite human being together and that lead to the feeling of kinship with others so that nothing human feels alien. The experience of the intactness of oneself provides the sense of well-being and wholesomeness without which we feel dehumanized (Kohut, 1971, pp. 49-50).

In normal development, the parents' capacity to serve as effective selfobjects provides the conditions which allow the infant to gradually internalize the functions they performed. These conditions, which include empathic responsiveness tempered by optimal frustration, permit the infant sufficient time and resources to forge a cohesive sense of self capable of mastering individuation (Goldberg, 1984; Glassman, 1988; Kohut, 1971, 1977).

Selfobject functions are not innate psychological functions. The awareness of self creates the desire for others to function in ways that fulfill needs. Well-functioning selfobjects provide a set of experiences that lead to an experience of cohesion and stability. The conscious awareness of selfobject functions is generally absent, unless there is a narcissistic wound at which point its absence is experienced as an injury to the self. When selfobjects fail to function in fulfilling ways, it can lead to disruption and fragmentation (Palombo, 2006).

Narcissistic pathology in Kohut's view is due to empathic failures in mirroring and idealization, which deprive the self of reliable, cohesive sources of narcissism. This results in an inability to maintain and regulate self-esteem at normal levels and causes deficits, distortions, or weaknesses in the sense of self (1977).

Banai (2005) empirically tested some of the core propositions of Kohut's self psychology. He found themes of narcissism are in line with Kohut's (1977) definition of pathological narcissism (Banai, 2005).

The findings support Kohut's (1971) general claim that selfobject needs or the denial of these needs in adulthood underlies the development of narcissistic personality. Furthermore, the results refine this general claim by delineating the specific selfobject needs that are significantly related to narcissistic personality. Specifically, this personality pattern is characterized by a strong need for mirroring as well as an avoidance orientation toward idealization and twinship. It seems that narcissistic individuals (those scoring high on self-absorption/self-admiration, superiority/arrogance, and exploitiveness/entitlement) have a strong need to be admired by others, while at the same time they avoid expressing their need for guidance from a powerful other or for twinship experiences (p. 12).

Psychosocial Theory of Development

Erikson (1980) provides a developmental perspective from childhood through later life, identifying a series of challenges/conflicts to be mastered across the lifespan. Erikson's frame includes eight stages with core dynamics evolving through the resolution of development "crises." Erikson is one of the first theoreticians to use identity as a central organizing principle through which to see human nature and the life course. Identity is formed by mastery or lack of mastery of the various developmental stages and tasks. In keeping with Erikson's polar view of development as a series of crises and resolutions, identity is seen as an evolving process impacted by the various choices and experiences manifest in an individual's life. Identity is created and modified by experiences, opportunities and relationships, in a dynamic and fluid manner—expanding and contracting with one's ability to integrate experiences into a cohesive sense of self (Erikson, 1980).

Erik Erikson (1980) regarded identity in the framework of traditional society. Ideas, values and manners were handed down from generation to generation and provided structure and continuity (Emde, 2005). Social expectations and self-perceptions are coordinated, so that a realistic sense of self is established within a certain social context (Emde, 2005).

Studies on identity formation and psychopathology from the perspective of postmodern theory are in agreement regarding the increasing acceleration of social development, which has created a social climate of continuous change (Ermann, 2004). These new conditions may affect identity formation, making it more difficult for an individual to achieve a stable identity. With this the traditional family has lost its central identity forming function through the acceleration of changes in society (Ermann, 2004). As a result of this development, adolescents searching for identification models have increasingly found these outside their families. The most important one may be the peer group, with its identity forming rituals.

Adolescence must resolve the crisis over identity vs. role confusion through which teens need to develop a sense of self and personal identity. Successful resolution of the crisis leads to an ability to stay true to oneself, while failure leads to role confusion and a weak sense of self (Erikson, 1980).

During young adulthood individuals need to master the formation of close friendships, intimacy and companionship. Progress on identity development and the achievement of criteria for adulthood are associated with positive friendships and romantic relationships while failure results in loneliness and isolation (Erickson, 1982).

During the young adult stage of development individuals must resolve the crisis of intimacy.

Facebook use may derail adolescent and young adults' progression through development as Facebook use may impede the ability to integrate experience and master the tasks necessary for healthy development.

Adolescent Development: Identity vs. Role Confusion

Friendships are very important to identity development for adolescents. Friends become the primary source of guidance, opinion formation and social support. Their opinions come to play a critical role in the adolescent's thinking and decision to making. These relationships provide a forum for questioning and resolving personal identity issues (Ponti & Tani, 2010). Additionally, they provide a refuge from conflict within family relations and can be a resource in the adolescent's and early adult's bids for greater independence.

Friendship in the traditional sense is a relationship which involves privacy, sharing of mutual interests, reciprocity, trust, and the revelation of intimate details over time (Ponti & Tani, 2010). These relationships significantly promote autonomy, self-esteem, identity, and social to cognitive development. Friendships also influence overall adjustment and individual well-being (Ponti & Tani, 2010).

Facebook offers adolescents and young adults an easy way to make friends quickly. On Facebook it takes just the click of a button to request or accept someone as a "friend." Yet, Facebook "friendship" is thoroughly different from real to world and traditional friendship (Boyd, 2006). The ease of making "friends" on Facebook may

promote the gathering of a superficial and expansive network of friendships. Facebook users might confuse the high number of Facebook friends with real connection with people. However, friendship in the traditional sense can only be possible when an intimate relationship based on trust has been established, and personal information is shared exclusively (Gerstein, 1978). Given that friendship depends on mutual revelations concealed from the rest of the world, it can only flourish within the boundaries of privacy; the idea of Facebook friends is an oxymoron.

In spite of the limitations on what it takes to create a traditional friendship on Facebook, it has become an increasingly popular medium for social interacting with others (PEW, 2012). In fact, users increasingly add more Facebook friends over time. Research shows the number of Facebook friends users have has steadily increased through the years, and has more than doubled over the past 5 years. In 2006, Facebook users had an average of 201 Facebook friends. By 2008 the average number of Facebook friends was 308 (Ellison, Steinfield, & Lampe, 2007) and in 2009 the average number was reported to be 358 (Pempek, Yermolayeva, & Calvert, 2009). By the year 2011 the average number of Facebook friend climbed to 428 (Kim & Lee, 2011).

This increase in number of Facebook friends has important implications because studies reveal a limit to the number of friends people can effectively manage (Boyd, 2006). And, the large number of Facebook friends may be unmanageable. Typically, people have a small group of friends, consisting of a dozen or so strong ties to those in one's social network (Boyd, 2006). The number of close friends and acquaintances on average consist of 150 social relationships. Historically, any number exceeding 150 leads to increased disconnection with existing members in one's network (Boyd, 2006). Thus,

those with more friends have relationships of lesser quality or may be more disconnected from others.

On average, users have about 100 more Facebook friends than they do in their offline social network (Walther, Van Der Heide, Kim, Westerman, & Tong, 2008). Freshmen college students with 200 or more Facebook friends scored lower on levels of self-esteem and personal and academic adjustment than freshman with less than 200 friends. They concluded that the more “friends” one has on Facebook, the less likely they are to have face-to-face friends (Kapidou, Costin, & Morris, 2011).

Facebook may impact the way people not only begin relationships but may also be changing the way relationships are ended. For example, typically, when a friendship ends, it just fades away (Sibona, 2010). On Facebook friendships can be abruptly terminated with one party declaring the friendship over. Since it is done online there may be an unreality to it, but in fact, there are real life consequences. Research has shown those who have been “unfriended” report negative effects such as lower moods, less feeling of belonging, less sense of control and reduced self-esteem (Sibona, 2010). Additionally, a recent study found that 40% of people surveyed would avoid in real life anyone who “unfriended” them on Facebook. This illustrates although these relationships are more easily attained and ended they are no less psychologically significant. Given the importance of friendships on healthy development the impact of Facebook use especially for adolescents has long-term important implications.

According to Miller and Lefcourt (1982), no single longitudinal variable predicts mental health as clearly as the capacity to remain happily married over time. The ability

to marry, to embrace the family of another, to have children and parent are all tasks of young adulthood that are based on completion of the tasks of adolescence.

Because of the lack of presence of another in conversation, responses are left to personal interpretation. We must ask if this fosters the prolongation of the self-aggrandizement typical of adolescence and, therefore, interferes with the development of empathy and concern for others.

Young Adult Development: Intimacy vs. Isolation

Greater intimacy in close relationships is associated with progress in adopting adult roles (Arnett, 2011). Intimacy needs are primarily met through romantic relationships, which provide emotional support (Arnett, 2011). The ability to establish intimacy in a relationship is an important predictor for healthy functioning, both psychologically and physiologically. In developing the Miller Social Intimacy Scale (Miller & Lefcourt, 1982), Miller and Lefcourt (1982) found intimacy positively correlated with levels of happiness, contentment, and social support in individuals. Young adults skilled at intimacy are more secure at interacting with others while remaining true to their own beliefs (Seginer & Noyman, 2005).

An important aspect of forming and maintaining social relationships is the level of social competence that an individual has (Larson, Whitton, Haurser, & Allen, 2007). Social competence has been defined as the ability to achieve and maintain emotional intimacy with one individual. It refers to interpersonal skills associated with intimate dyadic relationships and friendship, such as warmth, trust, and reciprocity (Larson, et al., 2007). These skills require empathy. In part, physically expressed cues betray something

about the state of the mind of the person to whom one is speaking. Empathy depends on the capacity of a person to correctly comprehend the other, the selfobject. Thus, partial or inaccurate cues, or failure to provide cues, will limit, skew or even block the empathic process (Buie, 1981). Since ambiguity is much greater in relationships involving social network sites than in person-to-person relating, a concern may be raised about whether a site like Facebook is creating a generation that has more difficulty relating authentically with others.

Relationships are changing as the world becomes increasingly connected by the Internet. The result is that traditional face-to-face communication is giving way to more remote online interactions, which have their own rules, language and etiquette. The cost of maintaining online relationships is low, and in the real world, the costs are higher (Sibona, 2010). Thus, over time, the use of Facebook may impede the achievement of social competence; the ability to engage in satisfying interactions focused on initiating, facilitating, and maintaining interpersonal relationships (Williams & Galliher, 2006). While Facebook may provide a means of initiating, facilitating, and maintaining interpersonal relationships, these relationships are not intimate or deep. For example, recent media reports have described intimate relationships among contemporary college students as characterized by a new persuasive hookup culture in which students regularly have sex with no strings attached. College students are more likely than those from earlier eras to have had a sexual partner during the past year who was a casual date, pickup, or friend (Monto, 2013). Although Millennials' report that parenthood and marriage are more important than career and financial success, they are in no rush to get married (PEW, 2010). Recent statistics show only 21% are currently married (half the

percentage of their parents' generation at the same ages) and only a third are parents. Only 17% of those in this study were married at the time of the research (PEW, 2010).

There is no single longitudinal variable that predicts mental health as clearly as the capacity to remain happily married over time. Research shows that marital dissatisfaction and instability are primarily due to a lack of emotional bonding between spouses (Emde, 1985). The developmental task of forming and sustaining intimate relationships may be affected as a person becomes increasingly engaged in virtual experiences. Communicating through Facebook may fulfill social needs, however, because there is no "real" dialogue or direct contact with others it does not meet deeper needs for intimacy.

Literature on Social Network Sites

Social network sites are recent developments in the history of social media. They are their own genre, but they also build on prior forms of social media.

The Web evolved from Web 1.0 (a medium that simply distributed content) to Web 2.0 a participatory platform in which users can create, edit and distribute their own content, on a global scale (Parscal, 2010). "The Web 2.0 is not a new web, with new languages or technology, new sites, new pages" (Bartolome, p. 2). "You cannot go to the Web 2.0, nor subscribe to it, register or log into it. It is a concept used to refer to sites and resources or developments that have some common characteristics" (Bartolome, 2008, p. 1). The Web 2.0 environment has enabled every internet user to modify, create, contribute and share personalized web content (Barbieri & Giacche, 2009). Web 2.0 has been described as a form of social revolution for bringing forth a new way to connect, collaborate, learn and create meaning (Downes, 2005).

Social network sites are probably the most important tools of Web 2.0 because of the tremendous adoption rates. Social networking sites have been defined as web-based services that allow individuals to construct a public or semi-public profile within a bounded system, articulate a list of other users with whom they share a connection, and view and traverse their list of connections and those made by others within the system (Boyd & Ellison, 2007).

They can be oriented toward work-related contexts (e.g., LinkedIn), the initiation of romantic relationships (e.g., Match.com, eHarmony.com and the original goal of Friendster), connecting those with shared interests such as music or politics (e.g., MySpace) or the college student population (the original incarnation of Facebook). Participants may use the sites to interact with people they already know offline or to meet new people (Ellison, Steinfield, & Lampe, 2007).

When people register on a social networking site they create a profile to represent themselves (Boyd, 2007). This is done through their answers to questions about themselves; these questions typically include descriptors such as age, location, and interests. Most sites also encourage users to upload a profile photo. Users can also identify other members of the same social networking site, with whom they have a relationship. When someone indicates another as a Friend, the recipient receives a message asking for confirmation. By collecting Friends, users create a “Friends list,” a personal network of connections.

An additional feature of social networking sites is they allow users to make comments on their Friends’ profiles, which are then displayed prominently and are visible to anyone who has full access to that profile. Besides leaving public messages on

profiles, social networking sites often provide the option of sending a private message. Most social networking sites also have privacy features that allow users to restrict access to their profile.

A recent study of how social networking sites are used by college students reveals the three most popular activities on Facebook were viewing photos, commenting on content and checking to see what someone is up to (Junco, 2011). People use social networking sites mostly to stay in touch with existing contacts rather than meeting new people. Young adults use Facebook mostly for social reasons such as sharing information about events, sharing photos, sharing personal information and keeping in touch (Bosch 2009). In addition, students also use Facebook to find past friends (McCarty, 2009).

History of Facebook

Facebook, the online social network site analyzed in this study, was created in 2004 by Mark Zuckerberg with the hope of changing how college students network. It started as a Harvard-only social network site before expanding to support all Ivy League schools. Later it included top tier colleges and, eventually, mainstream colleges. Initially only college students from pre-approved schools could join Facebook and they had to prove their collegiate affiliation by signing up with their “.edu” email addresses (Boyd & Ellison, 2008). The college-centered nature of Facebook quickly appealed to younger teenagers. They gained access to the site through older family members and friends from high school who had graduated and gone to college. Achieving access became a rite of passage (Boyd, 2008). Facebook gradually expanded to include high school students, business organizations, and, by 2006, everyone.

Facebook growth has been astronomical. From 2007 to 2008 it reported a staggering 733% increase in the number of active Facebook users (Mehdizadeh, 2010). As of September 2012, Facebook had more than one billion active users and today is the world's biggest social networking website (Fowler, 2012).

According to Facebook's website, "Facebook is a social utility that helps people communicate more efficiently with their friends, family, and coworkers" (<http://facebook.com>). Facebook enables its users to present themselves in an online profile, to accumulate "friends" who can post comments on each other's pages and to view each other's profiles (Ellison, et al., 2007). Facebook members can also join virtual groups based on common interests, see what classes they have in common and learn each other's hobbies, interests, musical tastes and romantic relationship status through the profiles (Ellison, et al., 2007).

Some young adults report benefits such as increased social support from their Facebook use (Madge, Meek, Wellens, & Hooley, 2009). One study conducted at two large public universities in Texas showed a positive relationship between intensity of Facebook use and students' life satisfaction, social trust, civic participation, and political engagement (Valenzuela, Kee, & Kerk, 2009). Similar research at Michigan State University (MSU) found Facebook plays an important role in which students form and maintain social capital (Ellison, et. all, 2007).

A study investigating personality differences in Internet use found that introverts, those people who have difficulty in face-to-face social interactions, were able to be more open and reveal their true selves on the Internet. Perhaps the invisibility makes this sharing of self and interest in others more accessible. On the other hand, extroverts are

able to be their real selves through traditional social interactions (Amichai-Hamburger, Wainapel, & Fox, 2002).

On Facebook, introverted users can be more outgoing, confident, and sociable because the lack of non-verbal cues, control over personal information disclosed, and ability to process conversation in slower than real-time provides increased control over one's presentation, making social interaction less overwhelming (Bargh & McKenna, 2004; Turkle, 2011). Maldonado, Mora, Garcia and Edipo (2001) found that introverts sent Internet messages with an extroverted tone and these messages contained more information than those sent by extroverted individuals. Facebook offers introverts the opportunity to express their true self in a more controlled environment where they can gain social recognition without feeling over stimulated by face-to-face interaction (Amichai-Hamburger, et al. 2002).

Despite these benefits there are also concerns regarding Facebook use. For example, a recent study found that users go on Facebook to update their status with increasing frequency. And, the more frequently people go on Facebook to update their status, the more significance they attribute to their Facebook/status. This frequency of contact with Facebook appears to correlate with lowered self-esteem (Schwartz, 2010). Another study found individuals who are not psychosocially healthy may have difficulty not only maintaining healthy social interaction in their real lives but also regulating their Internet use (Kim, LaRose, & Peng, 2009). Moreover, these individuals end up adding additional problems to their lives. He found that that individuals who were lonely or did not have good social skills could develop strong compulsive Internet use behaviors resulting in negative life outcomes (e.g. harming other significant other activities such as

work, school, or significant relationships) which suggests a potential malicious cycle of unregulated Internet use if not moderated (Kim et al., 2009).

A recent survey of 184 users of social networking sites found that heavy Facebook users are more likely to feel less socially involved with the community around them (Nyland, 2012). This study also reported that using Facebook for entertainment decreases user's level of social involvement (Nyland, 2012). Some recent studies report that social networking sites increase jealousy among couples (Christofides, 2012), and many teens reported suffering from negative social consequences or drama caused by Facebook use (Madden, 2013). Young adults reported feeling stressed about their perception of the high stakes of Facebook use and the additional burden of managing self-presentation on social networking sites (Madden, 2013).

Recently, there has been a tremendous amount of media attention surrounding the issue of narcissism and social network sites (Mehdizadeh, 2010). A recent study revealed those with narcissistic tendencies tend to accumulate Facebook friends preferring quantity over quality in their relationships (Schwartz, 2010). In recent studies higher levels of narcissism predicted higher levels of social activity in the online community and more self-promoting content in social networking sites (Buffardi, 2008).

Social network sites such as Facebook may be a particularly fertile ground for those who are highly narcissistic or those who have narcissistic deficits. Those with narcissistic tendencies tend to use relationships to appear popular and successful and to seek out many superficial and empty relationships (Campbell, 1999). Facebook may offer a gateway for hundreds of shallow relationships (i.e., Facebook friends), and emotionally detached communications (i.e., wall posts, comments, likes). This type of

virtual arena allows narcissistic gratification to flourish as users pursue an infinite number of “friendships.” Facebook additionally allows its users to control their presentation and present themselves in a positive way, by posting desirable information and selecting attractive, self-promoting photographs this may support the notion that they are exceptional people who deserve admiration and popularity. These sites thus may impact the development of narcissistic structures for its young adult users. Despite these negative consequences, recent reports suggest Facebook use among teens is not on the decline (Madden, 2013).

CHAPTER III

METHODOLOGY

Research Question

The problem explored in this study is the way in which social networking sites effect the development of the self in young adults. The study was designed to examine the possible connection between the use of Facebook and the level of narcissism among American young adult males and females between the ages of 18 and 29. The purpose of this study was to examine a small sample of Millennial Facebook users to look for potential connections and trends between Facebook use and narcissism.

Sample Selection

The Millennial Generation

The Millennial generation is the population of interest in this study. The Millennial generation was first named by Howe and Strauss (2007). The label covers everyone born from 1981 to 2000. They are the first generation to come of age in the new millennium (Howe & Strauss, 2000). Generations, like people, have personalities. The Millennial Generation, the American teen or twenty-something who is making the passage into adulthood at the start of this millennium, has a distinct identity (Pew Research, 2010). The use of technology is the attribute that most distinguishes the

Millennial generation from the preceding generations (Pew Research, 2010). This population is also the first generation in human history who regards behaviors like tweeting and texting, along with websites like Facebook, You Tube, Google, and Wikipedia, not as astonishing innovations of the digital era, but as everyday parts of their social lives (Keeter & Taylor, 2009). Millennials have fused their social lives with technology. For example, three quarters of Millennials have created a profile on a social networking site (PEW, 2010).

Although this generation of 18 to 29-year-olds are the most educated group in America, they represent the highest percentage of people who are unemployed, out of work or out of the workforce in almost four decades (Pew Research Center, 2010). According to census data, unemployment was 9.6% for 20 to 24-year-olds and 16.1% for 16 to 19-year-olds. Unemployment among young adults was 2 to 3 times higher than among adults overall (Pew Research, 2010). Americans have long considered a college education protection against unemployment and the key to economic mobility (Beaudry, 2013). Today 48% of recent college graduates work in jobs that do not require their college diplomas. Worse, 38% of recent graduates work in jobs that do not require a high school diploma (Huffington Post, 2010). The implications of this are long lasting. Research has shown that typically the consequences on careers and earnings are long-term for those young adults who graduate college in a bad economy, lasting as long as 15 years (PEW, 2010).

Enrollment Criteria

The purpose of this study was to examine a small sample of Millennial Facebook users to look for the relationship between Facebook use and its impact on the development of the self, with special attention to its impact on the development of the grandiose self. The enrollment criteria for the study consisted of U.S. men and women between 18 to 29 years old. According to the U.S. Census Bureau there are 41.9 million 18 to 29-year-olds in the United States today. Most of them (83%) have a Facebook account (Pew, 2012). This population is extremely vast.

Design

This quantitative study used a cross sectional design in which participants who met the required criteria were given a questionnaire to complete on the internet (Rubin & Babbie, 2001). Respondents were identified and recruited through SurveyMonkey, an online survey hosting website. SurveyMonkey has nearly one million members who have signed up to take surveys. When members sign up to join they are directed to fill out a profile which asks them additional behavioral questions designed to allow SurveyMonkey to send them surveys that are relevant to their interests. SurveyMonkey makes a contribution of \$.50 to the charity of the respondent's choice for completing the survey.

For the purposes of this study, 100 Facebook users (50 male, 50 female) were recruited. SurveyMonkey automatically computed the number of people who were invited to take this survey based on the number of finished responses that were needed, the response rates of the individual survey respondents, and the availability of survey

respondents who meet the targeting criteria. Based on these factors, email invitations were sent out to a group of respondents who matched the study's criteria progressively over a period of several days. Although the sample goal was 100, SurveyMonkey received and forwarded 123 responses before closing the study. All 123 responses were recorded for the survey, which indicates the number of participants who reached the online survey and proceeded through the Informed Consent page. A small number of qualified participants began the survey but did not make it through all of the measures ($N=3$). A total of $N=120$ ($n=66$ male, $n=54$ female) were considered complete and valid for use in the analysis.

Instrumentation

The cover page of the online survey was provided to participants with information regarding the purpose of the study and informed consent. Participants were not allowed to begin the survey until deciding to continue after reading the informed consent page (See Appendix A). Once consent was obtained, the participants were directed to start the survey and a record was stored in the SurveyMonkey database for that response; no record was stored for individuals who did not proceed past the informed consent page. The online survey included three sections; demographic detail section, the Narcissistic Personality Inventory (NPI - 16) a measure of narcissism, and lastly a questionnaire to access information about Facebook use and narcissism.

Demographic Questionnaire

Three demographic questions were asked using a forced choice format. The first section included the following demographic questions: age (year of birth), marital status (married, widowed, divorced, separated, or never married) and race (Latino, White, Black or African-American, Mixed, Asian, Native Hawaiian or other Pacific Islander, American Indian or Alaska Native). The survey included a filter to check that the participants were between the ages of 18 and 29-years-old before continuing.

Not included in the survey but provided by SurveyMonkey was demographic information on the respondents such as gender (male or female), household income (\$0 to \$24,999; \$25,000 to \$49,999; \$50,000 to \$99,999; \$100,000 to \$149,999; or \$150,000+) education (less than high school degree, high school degree, some college, associate or bachelor degree, graduate degree) and location (census region).

Narcissistic Personality Inventory (NPI - 16)

The Narcissistic Personality Inventory – 16 (NPI - 16) (Ames, 2006) is a shorter, unidirectional measure of the NPI - 40 (Raskin, 1988). The Narcissistic Personality Inventory (NPI - 40; Raskin & Hall, 1979, 1981) is the most widely used self-report measure of narcissism in social psychological research (Cain, 2008). The NPI is based on the Diagnostic and Statistical Manual of Mental Disorders III (DSM-III; American Psychiatric Association, 1980) clinical criteria for Narcissistic Personality Disorder (NPD). The American Psychiatric Association included the construct of narcissism in the third version of its Diagnostic and Statistical Manual of Mental Disorders (DSM -III;

American Psychiatric Association, 1980). The narcissistic personality is defined by the following clinical criteria:

1. A grandiose sense of self-importance or uniqueness
2. A preoccupation with fantasies of unlimited success, power, brilliance, beauty, or ideal love, exhibitionism
3. An inability to tolerate criticism, the indifference of others, or defeat
4. Entitlement or the expectation of special favors without assuming reciprocal responsibilities
5. Interpersonal exploitativeness, relationships that alternate between extremes of overidealization and devaluation
6. A lack of empathy

The NPI was designed to show whether someone measures either higher or lower in narcissistic traits than others in the population being studied. It does not measure pathology but measures narcissism as a universal personality trait though higher scores on the NPI indicate a more narcissistic personality. The original NPI - 40 scale was validated and factor analyzed by Emmons (1984) and these results were validated by Auerbach (1984), Biscardi & Schill, (1985), Leak (1984), Robbins and Patton (1985), and Watson, Grisham, Trotter, & Biderman (1984). On the basis of extensive studies and analysis, Raskin and Terry (1988) indicated that the NPI - 40 assesses a continuous construct from ranges of deficient narcissism through healthy narcissism up to the upper end. The NPI total score is a mix of adaptive and maladaptive content (Emmons, 1984) (Watson, 1984). Normal narcissism scores are related to an emotionally stable, extraverted and conscientious profile (Miller & Campbell, 2008) therefore, good mental

health is illustrated by positively correlated scores on the NPI (Rose, 2002). The NPI has also been found to correlate positively with measures of leadership/authority, achievement motivation, and self-esteem, and correlate negatively with neuroticism, shame, and depression (Miller & Campbell, 2008). Raskin and Terry (1988) identified seven factors of the NPI - 40 (i.e., authority, superiority, exhibitionism, entitlement, vanity, exploitativeness and self-sufficiency).

In Raskin & Terry (1988), alpha composite reliability scores of .83, .74, .80 and .90 were calculated. Whereas the NPI - 40 item measure revealed an internal validity of $\alpha=0.84$, the NPI - 16 showed $\alpha=0.72$. The authors believe the decrease in internal validity is due to the reduction in questions as they tested the instrument with eight questions, which further decreased the instruments internal validity. Despite this discrepancy, the two measures are correlated at $r = 0.90(p<0.001)$ (Ames, Rose, & Anderson, 2006). It also has a notable face, internal, discriminant and predictive validity.

The NPI - 16 instructs respondents to read 16 pair of statements and choose the one that comes closest to describing their true feelings or beliefs. A sample pair of descriptive statements would read, "I know that I am good because everybody keeps telling me so" and "When people compliment me I sometimes get embarrassed." Each of the 16 pair has one statement that is consistent with narcissism and one that is not. Those responses consistent with narcissism are added to create a single normal narcissism score. The NPI - 16 assesses two constructs of narcissism: Exploitativeness/Entitlement (Ex/En), Leadership/Authority (L/A), and Superiority/Arrogance, Self-absorption/Self-admiration (S/A).

According to Ames, et al. (2006), the NPI - 16 is both a valid and reliable way to capture a range of different facets of narcissism, particularly in situations where the use of a longer measure would be impractical (Ames et al., 2006).

Facebook Usage Questionnaire

The last section of the survey addressed participants' self-reported Facebook use and activity in order to assess the development of narcissism in relation to Facebook use. The survey contained 14 closed-ended and one open-ended question. These questions were modeled after a study on Facebook conducted by the PEW research studies (2010). Although there is no information on tests of reliability or validity in the Facebook questions, they have been used in the field, thus giving them some face validity.

The quantitative survey questions fell into one of four categories:

1. Time Spent (Questions 1 to 4)
2. Facebook Friends: Quantity vs. Quality Relationships (Questions 5 to 7)
3. Facebook Activities (Questions 8 to 10)
4. Selfobject Needs (Questions 11 to 14).

Additionally an open-ended question was included to examine respondent's perspectives on their use of Facebook: "Why do you post updates or photos on Facebook?" For a copy of the Survey instrument see Appendix B. Time Spent on Facebook:

- (Q1) About how long has it been since you started using Facebook?
- (Q2) How many days in a week do you use Facebook?
- (Q3) In a typical day, when you are using Facebook, about how many times do you check your Facebook account?
- (Q4) In a typical day, when you are using Facebook, about how much time do you spend on Facebook?

Facebook Friends; Quality vs. Quantity Relationships:

- (Q5) About how many Facebook friends do you have?
- (Q6) About how many of your friends on Facebook have you met in person?
- (Q7) How often do you share personal details about yourself with people you meet on Facebook?

Facebook Activities:

- (Q8) When you are on Facebook, about how much time do you spend posting things about yourself?
- (Q9) When you're on Facebook, about how much of your time do you spend looking at what your friends have posted?
- (Q10) When you are on Facebook, about how often do you comment on other Facebook users' activities (photos, posts, etc.)?

Selfobject Needs:

- (Q11) I feel that people who have more Facebook friends are more popular than me:
- (Q12) Thinking about all the different ways you socialize or communicate with friends about how often do you?
 - Send messages through Facebook
 - Communicate through email
 - Communicate through text message
 - Communicate through telephone
 - Meet in person
- (Q13) How important is it that you receive a response or comment to your activities (posts, photos, etc.) on Facebook?
- (Q14) I use Facebook in order to feel connected or be part of a certain community?

Data Management and Analysis

For the purposes of this study, an enhanced security option was purchased (SSL encryption) which works through a cryptographic system that secures a connection between a client and a server. This enabled the researcher to send and receive secure links and survey pages. The level of encryption is Verisign certificate Version 3, 128 encryption. The data were collected over a secure channel. Although data shipped over

the Internet is vulnerable because of the openness of networks, this danger is lessened for data collected through automated Web surveys (SurveyMonkey, Privacy Policy).

Data for the present study were collected by SurveyMonkey and downloaded into a secure SPSS file on a password protected safe computer. No identifiable information was collected. The data included the “Respondent ID,” which is an anonymous identification number assigned to each respondent the “StartDate” and “EndDate,” which are times the respondent began and completed the survey and the survey answers.

Descriptive data such as frequency, measures of central tendency and dispersion were computed on the demographic variables (age, gender, race, income, educational level and relationship status) to provide an overview of the sample characteristics and reflect any trends in responses. The demographic variables age and gender were further analyzed for any association with the variables of interest. In order to assess differences resulting from developmental stage, subjects were categorized into the following age groups: Group 1 between 18 and 21 years of age; Group 2 between 22 and 25 years of age; and Group 3 between 26 and 29 years of age.

The data gathered from this quantitative study were exported from SurveyMonkey into the Statistical Package for the Social Sciences (SPSS) version 21.0, which was used to analyze the data. The quantitative analysis included descriptive statistics involving frequency distributions and correlations between key dependent and relative variables.

Furthermore, qualitative analysis was performed on the open ended question, “Why do you post on Facebook?” to gain insight into respondents perception and motivation for posting on Facebook (Creswell, 2008). Common themes were extracted

using SurveyMonkeys text analysis tool. The data gathered from these categories were further analyzed by age group (18 to 21) (22 to 25) (26 to 29).

CHAPTER IV

RESULTS

A Quantitative Description of the Sample

Although the sample goal was 100, SurveyMonkey received and forwarded 123 responses before closing the survey. Of those who replied, 120 (97.6%) completed the survey (n=66 male, n=54 female). The participants' ages ranged from 18 to 29, with a mean age of 23 (SD=2.9). Only 16.4% of respondents were between 27 and 29 years of age. In terms of ethnicity, the majority (85%) identified as Caucasian, with the next largest group being Latino (8%), followed by Asian (6%), Mixed (4%), Black or African-American (2.5%) and Native Hawaiian or other Pacific Islander (2.5%).

At the time of the study, most participants (81%) were unmarried; 17% were married, and 2% were separated. The majority of the participants graduated from high school and had at least some college experience (76%) while only 2% had less than a high school degree. Although the socio-economic status of the participants varied, those making less than \$25,000 (31%) made up the largest group, followed by 25% earning \$50,000 to \$100,000 and another 25% earning over \$100,000 in income per year (See Appendix C).

Narcissistic Personality Inventory (NPI - 16) Score Results

The results of a Pearson correlation revealed no significant correlation between the total NPI score and any variable ($p > .05$). Results showed that the mean Narcissistic Personality Inventory (NPI - 16) score in this study was 4.2 ($SD = 2.7$). The NPI - 16 scores range from 1 which signifies low levels of narcissism, to 16 which signifies high levels of narcissism. A comparison of means between the male and female NPI scores showed that males had higher NPI scores ($M = 4.5$, $SD = 2.9$) than female respondents ($M = 3.9$, $SD = 2.3$). This finding supports multiple other studies, which have found that males tend to score higher on the NPI than do females (Ames, 2006).

Facebook Use Increases over Time (Figure 1)

At the time of this study, the majority of respondents had been on Facebook for two or more years (85%); only 15% were on Facebook for less than 2 years. Most respondents use Facebook every day of the week (70%) and spend an average of 73 minutes per day on Facebook.

Positive correlations were found between all three variables of time on Facebook; the length of time as Facebook user, the days per week using Facebook and the amount of time per day on Facebook. Number of years on Facebook was positively correlated with number of days a week ($r = .476^{**}$, $p > .01$) and amount of time per day ($r = .204^{*}$, $p > .05$) on Facebook. These correlations show a relationship of increasing Facebook use over time.

Figure 1

Correlations between Time Variables

Pearson Correlations Between Time Variables					
		Years on FB	Days on FB	Minutes On FB	Checking FB
Yrs. on FB	Pearson Correlation	1	.487**	.204*	.217*
Days on FB	Pearson Correlation	.487**	1	.291**	.412**
Time On FB	Pearson Correlation	.204*	.291**	1	.546**
Checking FB	Pearson Correlation	.217*	.412**	.546**	1
** . Correlation is significant at the 0.01 level (2-tailed).					
* . Correlation is significant at the 0.05 level (2-tailed).					

Facebook Activities Are Deeply Engaging (Figure 2)

Positive correlations existing between number of years on Facebook and users activities suggest that Facebook users tend to become deeply engaged with the activities Facebook has to offer. The table below illustrates the various positive correlations that were found. These correlations suggest that as Facebook becomes part of the daily routine, Facebook users become more engaged in the utilities that Facebook offers to communicate, socialize, and establish status.

Figure 2

Correlations between Time and Activities

Correlations Between Time on Facebook and Facebook Activities				
		Years on FB	Days on FB	Time On FB
Checking FB	Correlation	.217*	.412**	.546**
Number of FB friends	Correlation	.368**	.292**	.149
FB Friends met in person	Correlation	.507**	.362**	.101
How often Post	Correlation	.318**	.250**	.338**
How often Comment	Correlation	.373**	.459**	.353**
How often Look	Correlation	.537**	.483**	.223*
Share personal details	Correlation	.227*	.262**	.152
Importance of Response	Correlation	.239**	.343**	.128
Use FB for connection	Correlation	.300**	.302**	.183*
Send messages thru FB	Correlation	.271**	.389**	.369**
Email	Correlation	.235**	.191*	.032
Text	Correlation	.212*	.408**	.066
Meet friends socially	Correlation	.257**	.159	.047
*. Correlation is significant at the 0.05 level (2-tailed).				
**. Correlation is significant at the 0.01 level (2-tailed).				

Facebook Friends: Quality vs. Quantity of Relationships (Figure 3)

Despite how many Facebook friends participants reported having, the majority (85%) reported that they have met most or all of their Facebook friends. Only 16 % reported meeting half or fewer of their Facebook friends. On average, respondents had 450 Facebook friends (SD=390). Female respondents (n=54) had, on average, more Facebook friends (M=482, SD=428) than male respondents (n=66) (M=423, SD=356). This number ranged widely from 0 to 2000. Those between 18 and 21 years of age have more Facebook friends on average (m=538) than those 22 to 25 years of age (m=407) or those 26 to 29 years of age (m=382).

Figure 3

Mean Number of Facebook friends by Age Group

Age Group	Mean	N	Std. Deviation
18 to 21	538.13	45	462.866
22 to 25	406.86	44	335.721
26 to 29	381.61	31	330.735
Total	449.57	120	390.337

Number of Facebook Friends Correlations (Figure 4)

Number of Facebook friends was positively correlated with length of time as a Facebook user ($r=.368^{**}p>.01$) which suggests that over time users accumulate more and more Facebook friends. Number of Facebook friends was also correlated with days a week an Facebook ($r=.292^{**}, p>.01$), and frequency of checking Facebook ($r=.345^{**}, p>.01$). Additionally, positive correlations exist between number of Facebook friends and posting ($r=.241^{**}p>.01$), commenting ($r=.279^{**}p>.01$), looking ($r=.215^{*}p>.05$), and, feeling connected ($r=.261^{**}p>.01$). All of these correlations suggest Facebook friends are worth acquiring and investing time and energy into.

Figure 4

Correlations between Number of Facebook Friends and Facebook Uses

Facebook Friends Correlation Table		Number of FB friends	FB Friends met in person	Share personal details on FB
Yrs. on FB	Pearson Correlation	.368**	.507**	.227*
Days on FB	Pearson Correlation	.292**	.362**	.262**
Checking FB	Pearson Correlation	.345**	.141	.317**
How often Post	Pearson Correlation	.241**	.203*	.416**
How often Look	Pearson Correlation	.215*	.632**	.326**
How often Comment	Pearson Correlation	.279**	.319**	.461**
Use FB for connection	Pearson Correlation	.261**	.301**	.349**
** Correlation is significant at the 0.01 level (2-tailed).				
* Correlation is significant at the 0.05 level (2-tailed).				

Sharing Personal Details with Facebook Friends

Most respondents (58%) reported they do not share personal information with Facebook friends. Given that the majority of respondents (85%) report that they have met most, if not all, of their Facebook friends, the fact that they do not share personal details with their Facebook friends may indicate that although these relationships are valuable to the user, they may not be deep connections. Positive correlations between sharing personal details with Facebook friends suggest that, over time ($r=.227^{**}p>.01$), Facebook use may become a means or substitute for expression and connection with others.

Additionally positive correlations between sharing personal details with Facebook friends and feeling that receiving a response from their activities on Facebook is very

important ($r=.329^{**}$, $p>.01$) suggest that they are seeking to fulfill the selfobject need of mirroring through Facebook.

Type of Facebook Activity (Figure 5)

None of the respondents reported spending all their time on Facebook posting things about themselves, only 3% spend most of their time in this activity. Although most reported spending at least some time (61%) engaged in posting in general, 21% of the respondents reported that they do not post on Facebook. Qualitative analysis revealed a lower percentage of respondents stating that they do not post (14%). Furthermore, the 22 to 25-year-old group was found to be less likely to post than the other age groups.

Much of respondents' activity on Facebook can be characterized as voyeuristic. While on Facebook, 67% of respondents indicated they spend most of their time looking at friends posts. The majority (57%) comment on other Facebook users' activity (photos or posts) at least moderately often, while 33% comment slightly often, and 11% do not comment at all.

Having met Facebook friends in person increases the amount of time respondents spend looking at their pages ($r=.632^{**}$, $p>.01$).

Figure 5

Correlations between Facebook Activities

Correlations		How often Post	How often Comment	How often Look
Yrs. on FB	Pearson Correlation	.318**	.373**	.537**
Days on FB	Pearson Correlation	.250**	.459**	.483**
Time On FB	Pearson Correlation	.338**	.353**	.223*
Checking FB	Pearson Correlation	.362**	.300**	.283**
Number of FB Friends	Pearson Correlation	.241**	.279**	.215*
FB Friends met in person	Pearson Correlation	.203*	.319**	.632**
Share details on FB	Pearson Correlation	.416**	.461**	.326**
Importance of Response	Pearson Correlation	.300**	.268**	.411**
Use FB for connection	Pearson Correlation	.314**	.387**	.415**
FB friends sign of status	Pearson Correlation	.191*	.207*	.207*
Send messages thru FB	Pearson Correlation	.394**	.554**	.378**
Email	Pearson Correlation	.205*	.348**	.258**
Text	Pearson Correlation	.257**	.262**	.358**
Telephone	Pearson Correlation	.179	.208*	.205*
Meet friends socially	Pearson Correlation	.246**	.206*	.258**

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

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

Importance of a Response

It was thought those on Facebook the longest and/or the heaviest Facebook users may lack meaningful connections in their face-to-face relationships, and may seek a response from others via Facebook. This study found positive correlations between the importance of a response and; posting ($r=.236^*p>.05$), sharing personal details ($r=.328^{**}p>.01$), as well looking at friends' posts ($r=.303^{**}p>.01$). Thus, those that post, share, and look appear to be seeking a response or attention and affirmation.

Forty-one percent of those that post their activities on Facebook indicated it was important to them to receive a response. A negative correlation between age group and the importance of a response ($r = -.212^* p > .05$) suggests that those between the ages of 18 to 21 are looking for attention, acceptance or feedback most often on Facebook.

Facebook Use for Connection

Almost half of the respondents (48%) agreed with the statement “I use Facebook in order to feel connected or be part of a certain community.” A correlation was also found between using Facebook to feel connected and the amount of time spent looking at others’ posts ($r = .415^{**} p > .01$), and sharing details about themselves on Facebook ($r = .349^{**} p > .01$). There was a positive correlation between using Facebook to feel connected ($r = .294^{**} p > .01$) and agreeing that those with more Facebook friends are more popular.

Facebook as a Measure of Status

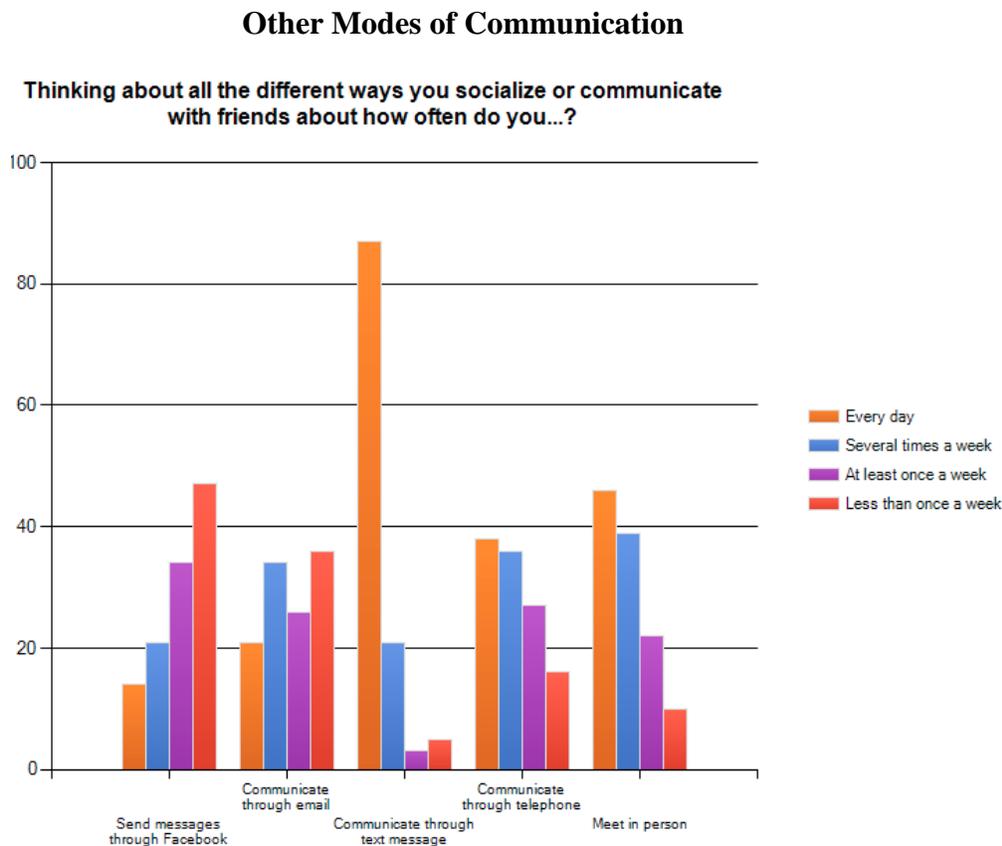
Only 14% of the respondents agreed with the statement, “I feel that people who have more Facebook friends are more popular than me.” There was a positive correlation between feeling friends were an indicator of status and commenting on Facebook friends’ pages ($r = .358^{**} p > .01$). These respondents may be heavily connected to Facebook and use it as an indication and means of gaining status.

In summary, Facebook use has been shown to be habit forming and overtime may become an important part of the social and emotional landscape of its users.

Communication (Figure 6)

Respondents in this study were asked how often they meet friends in person, telephone, text, email, or send private message through Facebook. The results are provided in the chart below.

Figure 6



Using Facebook to send personal messages to friends was the only communication method not correlated with increased socialization or communication outside of Facebook. Messaging through Facebook is an interesting behavior because it is highly positively correlated with variables in this study used to measure narcissism.

Those respondents that used Facebook to send messages tend to have been on Facebook longer ($r=.271^{**}p>.01$), spend more time on Facebook ($r=.369^{**}p>.01$),

comment more on other Facebook users ($r=.554^{**}p>.01$), and check their Facebook more often throughout the day ($r=.385^{**}p>.01$). Using Facebook to send personal messages was also positively correlated with days a week ($r=.389^{**}p>.01$), posting ($r=.394^{**}p>.01$), and sharing personal details ($r=.369^{**}p>.01$). The respondents in this study who send personal messages through Facebook are deeply connected to Facebook. In fact these users do not leave Facebook to communicate or socialize with others.

Age Group Comparisons (Figure 7)

An analysis of means across variables, broken down by age group, indicates that many of the heaviest Facebook' users are between 18 to 21-years-old. They spend the most time on Facebook (92 minutes per day) and have the most Facebook friends ($n=538$).

Those in this age group were more likely to feel that those with more Facebook friends were more popular and to use Facebook to connect or feel connected to a group. While on Facebook this group posts more, comments more, and, shares more often personal details about themselves with Facebook friends. Furthermore, due to their checking behavior and the correlation between age and needing a response it appears this group may have lower levels of self-esteem. In summary, the results show that those who started using Facebook between the ages of 13 to 16 and are now 18 to 21-years-old have integrated Facebook into their everyday life. They also show signs that they may be more insecure and dependent on Facebook to meet social, emotional needs.

Those between 22 to 25 years of age spend fewer days of the week on Facebook ($m=5$) and less time per day using Facebook. They are less likely to post about

themselves, share personal details with Facebook friends, comment on postings, and be concerned about receiving a response from Facebook friends. They also have the lowest number of Facebook friends. Text analysis revealed that this group is likely to post in order to share with family or friends.

Figure 7

**Age Group Comparisons
Time Spent on Facebook**

Age Group	Days on FB	Time on FB
18 to 21	5.69	91.60
22 to 25	5.00	59.11
26 to 29	5.45	65.97
Total	5.38	73.07

SELFOBJECT NEEDS

Age Group		Importance of Response	Use FB for connection	FB friends sign of status	Share personal details on FB
18 to 21	Mean	2.78	3.42	2.40	1.69
22 to 25	Mean	1.98	2.84	2.25	1.45
26 to 29	Mean	2.16	3.19	2.26	1.74
Total	Mean	2.33	3.15	2.31	1.62

TYPE OF FACEBOOK ACTIVITY

Age Group		Checking FB	How often Post	How often Look	How often Comment
18 to 21	Mean	6.73	2.07	3.78	2.64
22 to 25	Mean	4.82	1.84	3.41	2.41
26 to 29	Mean	4.90	1.94	3.68	2.84
Total	Mean	5.56	1.95	3.62	2.61

TYPES OF COMMUNICATION AND SOCIALIZATION						
Age Group		Meet friends socially	Telephone	Text	Email	Send messages thru FB
18 to 21	Mean	4.27	3.84	4.60	3.31	3.16
22 to 25	Mean	3.77	3.68	4.34	3.05	2.70
26 to 29	Mean	3.68	3.48	4.52	3.48	2.87
Total	Mean	3.93	3.69	4.48	3.26	2.92

Qualitative Analysis

“Why do you post updates or photos on Facebook?”

Posting on Facebook fulfilled many different functions for respondents. Some posted to keep in touch with friends and family, some as a way of getting attention and feedback and others as a tool for recording events in their lives (See Appendix D). Text analysis revealed the most common words were “sharing” (23%), “doing” (16%), and “family and friends” (14%). Although each age group used the word “friends” most often there were some differences between age groups which are illustrated in the table below (Figure 8).

Figure 8

Most Common Words by Age Group

18 to 21	%	22 to 25	%	26 to 29	%
Friends	30	Friends	36	Friends	34
Doing	22	Share	24	Share	33
Share	16	Photos	9	Family	19
Life	11	Facebook	6	Life	19
Remember	11			Doing	11
Say	11			Funny	11
Fun	5			Photos	7
				Facebook	7
				Touch	7
				Political	7

Further text analysis revealed nine common categories for posting on Facebook (Figure 9). The age group differences revealed those in the 18 to 21-year-old group were more likely to post for attention (16%); to receive a response (14%) and more likely to use the word “show” (22%), than those within other age groups, this suggests an element of performance or exhibitionism in their posting behavior. They were also over twice as likely to use the word “people” (43%) as their targeted audience, which suggests they are posting for more than friends and family possibly their audience is more superficial and less personal to them. None of those in the 22 to 25 group said they posted for attention and were less likely to be unaware of why they are posting (3%) than the other two age groups. Those in this group began using Facebook for its intended use; to help college students connect.

Figure 9

Nine Categories of Facebook use

CATEGORIES	18 to 21 n=37	22 to 25 n=33	26 to 29 n=27	All
Friends & Family	30%	33%	41%	34%
People	43%	12%	19%	26%
Keep in Touch	22%	24%	30%	25%
Sharing	24%	24%	33%	27%
Attention	16%	0	18%	11%
Inform/Entertain	22%	27%	19%	23%
Response	14%	6%	7%	9%
Show	22%	18%	7%	17%
Diary/Record	11%	12%	11%	11%
Don't Know	11%	3%	11%	8%
Don't Post	8%	24%	11%	14%

CHAPTER V

DISCUSSION AND CONCLUSIONS

Discussion

This research used two complementary theoretical perspectives; psychosocial and self psychology to investigate how Facebook affects the development of the self in young adults. Important theoretical concepts are summarized in order to understand the implications of the findings within the age groups. Exploratory analyses were performed on the data to determine if any additional correlations or relationships of relevance exist that warrant further investigation.

NPI Scores

NPI scores were used as a means of determining the extent to which Facebook use would have played an important or a minor role in self-development for the Millennial generation, those American young adults between 18 and 29 years of age. It was expected that that NPI scores would be higher for those respondents on Facebook the longest. Yet, the results of a Pearson correlation revealed no significant correlation between NPI score and any variable ($p > .05$). The average NPI - 16 score for those in this study was $m=4.2$. This is lower than those reported ($m=6.7$) in more recent studies (Lam, 2012). Therefore, the respondents in this study were not as narcissistic. This section will explore the potential meaning and reasons for this outcome.

A low NPI score indicates a lack of healthy narcissism (Schorre, 2002). The NPI was negatively correlated to dependency, with the negative relationship strengthening as the dependency subscales measured more immature forms of dependency: love dependency, representing the most mature form of dependency, and submissive dependency, the least mature form of dependency. Those with lower NPI scores reflect a tendency towards immature dependency, and attachment anxiety (Schorre, 2002). Research has shown those with low NPI scores tend to be lonelier and are more submissive and dependent on others. Perhaps the low NPI - 16 score found in this study ($m=4.2$) reveals a shift towards dependency which may help explain why young adults today are more likely than any other generation to move back home and live with their parents (Pew, 2010). This submissiveness may also help explain why those between the ages of 18 and 29 today have the highest rate of under or unemployment than older adults.

The low NPI score may help explain the results of a recent study which suggests that Millennials are more skeptical of the motivations of others (PEW, 2010). It is possible that if they are more skeptical of the motivations of others; they may be less likely to engage in “real” relationships. Being skeptical implies that this generation does not have much trust, a necessary ingredient for face-to-face relationship. If you are not trusting, you are not relating. If you are not relating, you are not risking. If you are not risking, you are more likely to interact via Facebook, a less vulnerable means of relating.

Alternatively, research indicates those with low NPI scores are more anxious about becoming attached (Schwartz, 2010). This is supported by census data, which shows that those in this generation are less likely to get married. Additionally, lower

levels of narcissism contribute to lower quality relationships which may in turn affect social competency and future relationships, most importantly, marital satisfaction. Why do we care? The Millennial generation is getting into marital relationships in lower numbers. Research has indicated that people who are not in marital relationships report having less satisfaction in life.

The low NPI score coupled with census data may reveal that members of the Millennial generation may have difficulty with intimacy and fitting into a real life work culture. Their social experience has been isolated because of the integration of Facebook into their daily lives. It might be difficult to face the rites of passage and complexities of real life work and relationship experience when there have not been “real” relationships with which to deal.

One of the significant findings of this study was the low NPI score of its participants. Interestingly this low NPI score did not correlate with any variables in this study. The discussion will now turn to possible reasons why.

First, it is possible that the NPI - 16 was an insufficient measurement tool because it does not include an in to depth assessment of maladaptive constructs of narcissism and leaves out constructs that may be relevant to this study. The NPI - 16 is derived from the NPI - 40. The full scale NPI - 40 measures seven factors of narcissism: authority, superiority, exhibitionism, entitlement, vanity, exploitativeness, and self-sufficiency (Raskin & Terry, 1988). In contrast, the NPI - 16 only assesses authority, superiority exploitativeness, and entitlement (Cain, 2008) leaving out vanity and exhibitionism, which is problematic given the focus of this study.

Secondly, the method employed for the study may have inadvertently introduced bias. It could be that those who sign up to take surveys through SurveyMonkey are not on Facebook as much as others. They also may be less narcissistic than others given that many take surveys to benefit charities. Thus, the survey may have been affected by self-selection biases. In addition, the consent form clearly stated that the study was about Facebook and narcissism. Having this information may have had an effect on how participants answered the questions on the survey. It is possible that respondents would have a negative association with the word “narcissism” because of its negative connotation in common usage and this may have encouraged them to choose or state answers that were felt “less” narcissistic.

Other problematic issues that would have led to lack of correlation between NPI score may have been due to formatting issues on SurveyMonkey. A possible issue was, there were some formatting issues discovered that may have led to some confusion for respondents when answering questions. SurveyMonkey divided the question responses in such a way that some respondents seemed to have inadvertently checked an invalid box. Each question was divided by a line; therefore, some respondents checked a line instead of a box because the line contained a check box. However, the researcher was able to review all of the responses and when a line was checked determine which response was intended and the errors were corrected.

Although the NPI - 16 scores did not correlate with Facebook use there are a number of variables that reflect the components of narcissism that appear to be related to Facebook. Those correlations will be explored in the next section. This research used two complementary theoretical perspectives; psychosocial and self psychology to

investigate how Facebook affects the development of the self in young adults. Important theoretical concepts are summarized in order to understand the implications of the findings of the survey within the age groups.

Facebook Use Increases

The relationship between the number of years on Facebook and time spent on Facebook suggests that, over time, Facebook becomes part of respondents' daily life ($r=.487^{**}$). Additionally, positive correlations between years on Facebook and other variables suggest that, over time, Facebook becomes part of how users relate with others. This study found that as the length of time on Facebook increases so do most variables associated with the concepts of narcissism such as checking, posting, commenting, sharing personal details, needing a response, using Facebook for connecting, and sending messages through Facebook. This finding was significant across age groups.

This indicates a growing dependence on Facebook to meet selfobject needs. At the inception of Erikson's theory over 40 years ago, intimacy was defined by face-to-face connection (Erikson, 1968). Because Facebook is not face-to-face, it cannot facilitate the provision of opportunities to deepen emotional bonds between people. This site does not provide the mirroring function that is necessary for the development of empathy, which is the precursor for intimacy. Psychological development may be impaired because Facebook does provide some selfobject functions necessary for healthy development (Kohut, 1968), and stops short of allowing for the creation of meaning. Meaning and identity are formed through our relationships with one another and deepened bonds are constructed through experience in the interaction (Main, 1985). Individuals need the mirroring of others to understand who they are. Facebook is

inherently a one to sided communication in which interpersonal, relational needs are evoked, but it ultimately fails to fulfill deeper social emotional needs. Perhaps it generates a repetition compulsion, a behavior pattern in which a person repeats the disappointing action over and over again hoping for a better outcome (Ermann, 2004) (Freud, 1920).

Overall, we can see that Facebook has many limitations in terms of its ability to promote and develop true intimacy among individuals. This conclusion is drawn by considering the determinants of intimacy as defined by Erickson and Kohut. This is the overall conclusion when considering all of the age groups and variables in the study. However, the findings did differ among the different age groups with one age group having a larger effect than others. In many ways, the findings per age group are most telling and interesting with regard to the initial research question. We will now turn to a discussion of the findings broken down by age group.

18 to 21 Years of Age

This section explores the findings within the 18 to 21-year-old group. An analysis of means across variables, broken down by age group, indicates, as previous studies have found, that the heaviest users of Facebook are within the 18 to 21-year-old group (Lampe, 2012). Those in this age group spend the most time on Facebook and it appears they may be more dependent on Facebook to meet important social and emotional needs. Those in this age group have substantially more Facebook friends ($M=538$) than any other age group; they spend more days and time during the week on Facebook. Additionally, they

check their Facebook more often, and are more likely to agree that those with more Facebook friends are more popular.

This may be, in part, caused by the fact that they first started their Facebook use when they were adolescents (13 to 16). Adolescent development is about separating from family. This is done through relationships with friends and peers (Erikson, 1968). Thus, this group, more than any other, may be seeking to use Facebook to fulfill the adolescent need to relate more closely to friends and peers. We will explore the implications of that tendency in terms of Erickson's notion of psychosocial development and Kohut's conceptualization of the psychology of the self.

Impact of Facebook Use on Adolescents

Erickson suggests that adolescents between the ages of 13 to 18 will experience a period of psychosocial crisis to identity and role confusion. While undergoing this developmental stage, adolescents become conscious about sexual identity, peer relationships and other social interactions. During this stage of development, the peer group becomes the mirror, the normative point of reference through which they mature, experience new social roles, and learn more efficient strategies for conflict and its resolution. Given the importance of peer and friends during this stage of development, the finding that the 18 to 21-year-olds spent the most amount of time on Facebook (92 minutes per day) and had the most Facebook friends (N=538) may imply that they are replacing traditional friendships with Facebook interactions.

Using slightly different terms, Kohut makes a similar point, but begins with the concept of the self and its development. According to Kohut, the self is never static but is constantly being updated in interactions with others who aid the self in regulating

affect. Through this process, the self learns to regulate affect and also helps regulate the affect of the other. Thus, the process of self-regulation is actually a process of mutual regulation where peers use each other as a means of regulating the self. Mutual regulation is critical for healthy social development and it goes beyond learning how to regulate oneself. Mutual regulation includes the sense that one can share experiences. For mutual regulation to occur individuals need face-to-face interaction.

Through the lens of self psychology, we can see how clearly Facebook fails to meet these mirroring self object needs. When relating through Facebook there is no responsive other, only an imaginary other who is presumed responsive. Relating through Facebook lacks the face-to-face experience that is necessary for the selfobject function that provides mirroring. The expectation of a contingent immediate response from others to affirm one's self and regulate anxiety is imagined (Ermann, 2004). It appears, given the study's results showing a correlation between this age group and the importance of a response ($r = .212$, $p > .05$), that during adolescence this need for mirroring from peers is particularly important and in spite of the fact that adolescents are particularly drawn to Facebook, Facebook is in fact an inadequate medium for meeting that need.

Facebook provides the opportunity for admiration in the form of projection—that is one's own internal wish to be admired is projected onto the invisible other and experienced as if it were a reflection from outside. On Facebook there is no idealizable other; there is no other who is similar who is not imaginary. This essentially suggests the possibility that normal narcissism becomes distorted in a world of fantasies that are not mediated by real world others. In fact, affirmation, idealization, and self-esteem are presumed as a result of the “showing” or “posting” of one's life to others. Exhibitionism

is a construct used to measure levels of narcissism and according to recent research; it appears that the Millennial generation may tend to have exhibitionistic tendencies. One in five have posted a video of themselves online; nearly four in ten have a tattoo (and for most who do, one is not enough, about half of those with tattoos have two to five and 18% have six or more) and nearly one in four have a piercing in some place other than an earlobe to about six times the percentage of older adults who have done this (Pew Research, 2010).

Typically, in order to make a good impression, people look to others to see how others are acting in any given context and adjust their own behavior accordingly (Goffman, 1959). Depending on how they are received, people alter their behavior to increase the likelihood of being perceived as intended. The iterative acts of impression management are complicated by the limited social feedback on Facebook where the context is unclear and constantly changing (Boyd, 2008); it is not certain that the person will actually receive a response.

How they are perceived by their peers is very important. This leads towards an inclination for over exposure to increase the chances of getting the needed response and attention from others. This could help explain why those in this age group are more likely to post for attention (14%), to receive a response (14%) and more likely to use the word “show” (21%) than those within other age groups. They were also over twice as likely to use the word “people” (43%) as their targeted audience this suggests that their intended audience is less personal and diffuse. When asked why they posted they were also likely to say “to show” or “for attention.” One 19-year-old respondent stated, “Honestly for the attention, and hope that people will like what I have to post.”

Implications of Number of Facebook Friends

The average number of Facebook friends that users report to have has been rising substantially over the years. Those in the 18 to 21-year-old group have substantially more Facebook friends ($m=538$) than any other age group, and are more likely to agree that those with more Facebook friends are more popular. This desire for popularity may lead these users to impulsively obtain as many “friends” as possible. This is not an expression of the human need for companionship, but of a different need no less profound and pressing, the need for status. Because status and popularity are so important for adolescents it could imply that friends become valued in terms of quantity, not quality. The costs of this attitude are high. Not only does acquiring and maintaining Facebook take time and energy, it is also a superficial marker of their value and identity. This type of gathering of a superficial and expansive network of friendships may impact development given prior research showing a decrease in the quality of relationships when there are more than 150 friends (Dunbar, 1993).

21 to 25-Year-Old Age Group

The data in this study suggest that those in the 21 to 25-year-old age group, who were 18 to 21 when they began using Facebook, tend to use Facebook less and may use it for different reasons. An analysis of means broken down by age group shows that those in this age group are on Facebook fewer times per week and spend less time on Facebook per day. When compared to other age groups, they are less likely to post about themselves, share personal details with Facebook friends, comment on others postings, and are less likely to need to receive a response on Facebook. Text analysis shows that

they are more likely than the 18 to 21-year-old group to post to “share with family and friends” than to “show.” Text analysis revealed the most common words that those in this age group used were “friends,” “share,” “photos,” and “Facebook,” they are more likely to use it to communicate information, as a utility, to record pictures and events, and share with family and friends.

When Facebook became available, these 22 to 25-year-olds were already either in college or moving on from high school. This implies that they had already gone through the stage of separating from family and relating more with friends and peers. Thus, they were less vulnerable to the need to separate from family when they first started interacting via Facebook. As a result, they were less likely to use Facebook for that purpose. Instead, they were engaged in the search for, and establishment of, new connections and social networks with others (Ellison et al., 2007) for the purposes of establishing a career and an adult life.

For many young adults, adjusting to life after high school and/or going to college is a difficult process because they struggle to connect to new networks and enter the adult world. During this time of new challenges, Facebook presents an opportunity to search for and create a wider circle of “friends” (Ellison et al., 2007). Facebook seems to be a simple solution, a short cut, to help college students connect, fulfilling the function for which Facebook was initially developed. Facebook users who have successfully mastered the adolescent stage of development and have a strong sense of identity may be somewhat insulated from the negative effects of Facebook use and may benefit from the role that Facebook can play in helping to build effective networks that can become resources for careers and other opportunities. Using Facebook may support development

along the connectedness dimension as it possibly provides their users with a community and a way for young adults to understand larger audience. Users use Facebook to reconnect with old friends and acquaintances and therefore, can increase their sense of belonging by connecting to others through Facebook (Ellison et al., 2007). Indicating that Facebook may have positive implications for the well-being of its users if used for the purpose for which it was originally developed.

26 to 29 Year-old Age Group

Interestingly, those in the 26 to 29 age group are on Facebook more than those between 22 to 25 years of age. They also share more personal details with Facebook friends and are less likely than the other groups to meet socially, which may be developmentally appropriate as they are perhaps establishing romantic relationships, establishing careers and starting families. They appear to use Facebook to share with and update friends and family. They may be more aware of the dangers of Facebook. One 27-year-old respondent stated, "I no longer use Facebook but am providing info based on how I used to use it. I don't think Facebook makes us happier and is overall harmful to our mental well-being." Although it appears that Facebook use is habit forming for all its users, but the effect of Facebook use may depend on the stage of development when Facebook use began. The younger group struggling through the adolescent phase of development and identity formation as Facebook became part of their social life may be more likely to be vulnerable to the effects of Facebook. Yet, perhaps during college, typically perceived as transitional period Facebook may function as a compensatory environment and provide users with improved sense of belonging and psychological well-being.

Limitations of the Study

A limitation of the study is the lack of ethnic diversity. The sample in this study was also not representative of the general American Millennial generation (18 to 29 years of age). The nature of the recruitment method and the medium (i.e., Internet) will skew the sample from the U.S. population in a few ways. For instance, the overall SurveyMonkey Audience, the people who have signed up to take surveys sent from SurveyMonkey, all have some kind of Internet access. Although access to the Internet has been rapidly expanding there is a portion of the population that remains without access to the Internet (Cooper & Miller, 2009). Americans with Internet access on average earn a higher level of income and have achieved a higher level of education than those people who do not have Internet access (SurveyMonkey). In fact, this study found a positive relationship between education and length of time as a Facebook user ($r=.193^*$, $p>.05$). Also, the composition of an online audience of people willing to take surveys will skew in some ways from that of the general U.S. population. Those with higher levels of narcissism may not be members of the SurveyMonkey audience. Some people take surveys on SurveyMonkey for the benefit of charities and for highly narcissistic people there may be no direct advantage. Therefore, the reader is cautioned against any attempt to generalize these findings beyond the parameters of the specific population from which this sample was drawn.

Another limitation is that the study relies on self-report instruments, which presents an issue of response bias as a result of participant subjectivity and social desirability. Narcissists might bolster their self-image by perceiving themselves more positively than they are seen by others (John & Robbins, 1994).

Furthermore, question #14 asked participants to rate their agreeableness to the statement “I use Facebook in order to feel connected or be part of a certain community.” This question does not define the construct of connection or community and is overly vague. For example, does Facebook facilitate users’ feelings of connection to self, to community, or both? Future studies should examine whether users use Facebook when they feel disconnected in order to gain a feeling of connection, or whether they feel connection while on Facebook, as well as if the sense of connection or belongingness is an outcome of being on Facebook.

Conclusion

Communicating through Facebook may fulfill social needs but because there can be no real dialogue or contact with each other, the gratification of deeper emotional needs may be frustrated. Facebook communication does not provide the necessary ingredients for healthy self-development as it does not take place in person or face-to-face (Stern, 1985). The mirror or contingent immediate response from others to affirm one’s self is missing through Facebook relating (Kohut, 1984). Because there is no interactive need regulation, its user is caught in a relationship without reaction, contingency and solution. When the need for belonging by connecting with others and having experiences validated is frustrated because of the use of Facebook, feelings of disconnection result. Perhaps the Facebook user can resolve this conflict by denying needs for connection or by withdrawal from real face-to-face contact (Ermann, 2004). On the other hand, this failure to meet the deeper emotional need for connecting may cause the user to compulsively use Facebook in the hopes that they will in fact get what they need. This follows Freud’s (1920)

concept of repetition compulsion; the person repeats the disappointing action over and over again hoping for a different outcome (Ermann, 2004).

In the final analysis, this study found that Facebook has an addictive quality and over time Facebook users depend or rely on Facebook increasingly more to connect to others, for attention, and particularly for adolescent users, to achieve status.

With this knowledge in mind, we must further research the effect that social network sites have on the development of young adults who are using these sites to fulfill their needs. If it is true that young adults achieve a sense of self via relationships to others, then their participation in a virtual world becomes critical for the clinical social work community to understand. Clinical social workers may increasingly encounter patients with an inability to relate or form satisfying relationships with others because of the use of Facebook.

Implications for Social Work Practice

The core of clinical social work is the relationship between the individual and his or her social environment. As clinicians' we should be concerned with the impact of virtual relationships on the nature and dynamics of all relationships, including the therapeutic relationship itself.

The field of social work should be aware of new Facebook related problems across all ages that may be encountered in counseling sessions as well as the risks and benefits of this social media movement (Keller, Moore, Hamilton, Terrell, & Hahn, 2011). Given the drastic increases in Facebook usage clinicians will now need to become well-versed in understanding the use of Facebook by their clients to get a better grasp of the broader social life and relationship status. They will also need to understand the

quantity and quality and technical aspects of online relationships in order to help their clients achieve better outcomes such as higher self-esteem, and less loneliness.

It is important to understand users' characteristics and their investment in Facebook. Clinicians may choose to ask their clients whether or not they use Facebook to send messages as a diagnostic question to assess dependence on Facebook given the strong relationships between using Facebook to send personal messages and heavy use and dependence on Facebook.

This study focused on a snapshot in time for each of the participants. Future studies may investigate the longitudinal effect of Facebook. Future studies should also focus on the usage of Facebook among those associated with marginalized groups. These groups may use Facebook as a way to feel connected, and this may result in a bolstering of ego connectedness or sense of belonging. Thus, more research needs to be done to understand the world of social networking and how these websites harm or help create intimate relationships.

APPENDIX A
INFORMED CONSENT

Informed Consent Form

Purpose of the study:

The purpose of this study is to examine the relationship between Facebook use and the development of narcissism. This is a study being conducted by Suzanne Blaising, LCSW under the direction of dissertation committee chairperson Barbara Berger, PhD towards the fulfillment of the degree of Doctor of Philosophy from the Institute for Clinical Social Work, Chicago, Illinois. 100 participants will be recruited for this study.

What will you be asked to do:

You will complete a survey, which will take approximately 20 minutes to complete. The survey will include questions about your feelings about yourself, your relationships, and your Facebook habits. You will also be asked some demographic information so that we can accurately describe the general traits of the group of people who participate in the study.

Benefits of this study:

You are not expected to receive any direct benefits from your participation other than those offered through SurveyMonkey. The investigator hopes that the information gained here may benefit society indirectly.

Risks or discomforts:

No risks or discomforts are anticipated from taking part in this study other than those encountered in day-to-day life. However, you should understand that some questions in the survey will ask you about your feelings, your relationships, and your Facebook use may cause you discomfort. If you feel uncomfortable with a question, you can skip that question or withdraw from the study altogether at any time.

Confidentiality:

Please note that although online communications are never guaranteed to be 100% secure, your privacy and confidentiality will be protected to the extent technologically possible. SurveyMonkey, the host of this survey, will not forward identifying information such as your name, email address, or IP address. Your participation in this online survey involves risks similar to a person's everyday use of the Internet. The researcher's computer will be password protected and a hard copy of the research will be kept in a locked filing cabinet for five years; only the researchers will have access to the records.

Taking part is voluntary:

Your participation is voluntary; you are free to withdraw your participation at any time. If you do not want to continue, you can simply close the website window. If you do not click on the "submit" button at the end of the survey, your answers and participation will not be recorded.

How the findings will be used:

The results of this study will be used for scholarly purposes only. The results from the study will be presented in educational settings and may be published in a professional journal in the field of psychology. This study will be published as a permanent record on the ICSW website. No identifying information will be used when the results of the study will be presented or published.

Contact Information:

If you have concerns or questions about this study, please contact Suzanne Blaising, LCSW at sblaising@icsw.edu (312-944-3565) or the Institute for Clinical Social Work Committee chairperson, Dr. Barbara Berger, PhD at bbergerphd@sbcglobal.net (312-346-7757).

- I understand that the Institute for Clinical Social Work has no affiliation with Survey Monkey.
- I understand that Survey Monkey will be marketing Survey Monkey to me.

“If I have any questions about my rights as a research subject, I may contact Theresa Vidalon, Chair of the Institutional Review Board, The Institute for Clinical Social Work at Robert Morris Center, 401 South State Street, Suite 822, Chicago, IL 60605 at (773) 319-9587 or Theresa.vidalon@gmail.com.

I have read and understood the above information about the study and consent to participate. I understand I can withdraw my consent at any time.

APPENDIX B
SURVEY INSTRUMENT

PAGE 1. DEMOGRAPHICS

Q1

In what year were you born? (Enter 4-digit birth year; for example, 1990)

Q2

Are you now married, widowed, divorced, separated, or never married?

- Married
- Widowed
- Divorced
- Separated
- Never married

Q3

What is your race? Please choose one or more.

- Latino
- White
- Black or African-American
- Mixed
- Asian
- Native Hawaiian or other Pacific Islander
- American Indian or Alaska Native
- Other

Other (please

specify)

PAGE 2

Q4

2. NPI 16

- I really like to be the center of attention
- It makes me uncomfortable to be the center of attention
- _____
- I am no better or no worse than most people
- I think I am a special person
- _____
- Everybody likes to hear my stories
- Sometimes I tell good stories

- _____
- I usually get the respect that I deserve
- I insist on getting the respect that is due me
- _____
- I don't mind following orders
- I like having authority over others
- _____
- I am going to be a great person
- I hope I am going to be successful
- _____
- People sometimes believe what I tell them
- I can make anybody believe anything I want them to
- _____
- I expect a great deal from other people
- I like to do things for other people
- _____
- I like to be the center of attention
- I prefer to blend in with the crowd
- _____
- I am much like everybody else
- I am an extraordinary person
- _____
- I always know what I am doing
- Sometimes I am not sure what I am doing
- _____
- I don't like it when I find myself manipulating people
- I find it easy to manipulate people
- _____
- Being an authority doesn't mean that much to me
- People always seem to recognize my authority
- _____
- I know that I am good because everybody keeps telling me so
- When people compliment me I sometimes get embarrassed
- _____

- I try not to be a show off
- I am apt to show off if I get the chance
- _____
- I am more capable than other people
- There is a lot that I can learn from other people

PAGE 3 Facebook Use

Q5

About how long has it been since you started using Facebook

- Never used Facebook
- Less than 1 year
- 1 to 2 years
- 2 to 4 years
- More than 4 years

Q6

How many days in a typical week do you use Facebook?

Q7

In a typical day, when you are using Facebook, about how many times do you check your Facebook account?

Q8

In a typical day, when you are using Facebook, about how much time do you spend on Facebook?

Hours

Minutes

Q9

About how many Facebook friends do you currently have?

Q10

About how many of your friends on Facebook have you met in person?

- All of them
- Most of them
- About half of them
- A few of them
- None of them

Q11

How often do you share personal details about yourself with people you meet on Facebook?

- Extremely often
- Very often
- Moderately often
- Slightly often
- Not at all often

Q12

When you're on Facebook, about how much of your time do you spend posting things about yourself?

- All of it
- Most of it
- About half of it
- Some of it
- None of it

Q13

When you're on Facebook, about how much of your time do you spend looking at what your friends have posted?

- All of it
- Most of it
- About half of it
- Some of it
- None of it

Q14

When you are on Facebook, about how often do you comment on other Facebook users' activities (photos, posts, etc.)?

- Extremely often
- Very often
- Moderately often
- Slightly often
- Not at all often

Q15

I feel that people who have more Facebook friends are more popular than me.

- Strongly disagree
- Disagree
- Neither agree or disagree
- Agree
- Strongly agree

Q16

Thinking about all the different ways you socialize or communicate with friends about how often do you...?

	Every day	Several times a week	At least once a week	Less than once a week
Send messages through Facebook	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communicate through email	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communicate through text message	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communicate through telephone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Meet in person	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (please specify)				

Q17

How important is it that you receive a response or comment to your activities (posts, photos, etc.) on Facebook?

- Very important
- Somewhat important
- Important
- Somewhat unimportant
- Not important at all

Q18

I use Facebook in order to feel connected or be part of a certain community

- Strongly disagree
- Disagree
- Neither agree or disagree

- Agree
- Strongly agree

Q19

Why do you post updates or photos on Facebook?

APPENDIX C
DEMOGRAPHIC INFORMATION

Demographic Information**Gender**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	66	53.7	55.0	55.0
	Female	54	43.9	45.0	100.0
	Total	120	97.6	100.0	
Missing	System	3	2.4		
Total		123	100.0		

Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than high school degree	3	2.4	2.5	2.5
	High school degree	23	18.7	19.2	21.7
	Some college	47	38.2	39.2	60.8
	Associate or bachelor degree	37	30.1	30.8	91.7
	Graduate degree	10	8.1	8.3	100.0
	Total	120	97.6	100.0	
Missing	System	3	2.4		
Total		123	100.0		

Household Income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	\$0 to \$24,999	38	30.9	33.0	33.0
	\$25,000 to \$49,999	15	12.2	13.0	46.1
	\$50,000 to \$99,999	31	25.2	27.0	73.0
	\$100,000 to \$149,999	13	10.6	11.3	84.3
	\$150,000+	18	14.6	15.7	100.0
	Total	115	93.5	100.0	
Missing	System	8	6.5		
Total		123	100.0		

Location (Census Region)

	Frequency	Percent	Valid Percent	Cumulative Percent	
	Middle Atlantic	8	6.5	6.8	6.8
	East North Central	42	34.1	35.6	42.4
	West North Central	12	9.8	10.2	52.5
	South Atlantic	16	13.0	13.6	66.1
Valid	East South Central	3	2.4	2.5	68.6
	West South Central	13	10.6	11.0	79.7
	Mountain	7	5.7	5.9	85.6
	Pacific	17	13.8	14.4	100.0
	Total	118	95.9	100.0	
Missing	System	5	4.1		
Total		123	100.0		

APPENDIX D
QUALITATIVE RESPONSES

Year	AGE	WHY DO YOU POST ON FACEBOOK?
1985	28	To create a photo album that I can easily show off to others. I post status updates to stimulate thought and discussion of political or religious matters.
1985	28	none
1985	28	To keep in touch with long distance friends.
1985	28	Share what I've been doing
1985	28	To share with family and friends whom I don't get a chance to talk with or see on a regular basis.
1985	28	To inform others about my life and the lives of my wife or pets; to entertain with interesting links
1985	28	Keep in touch with others
1985	28	Easy
1986	27	To update friends on what I might be doing or to post a comment of what's on my mind and get some feedback or to simply make people laugh
1986	27	To share photos with my family that want to see them.
1986	27	Yes
1986	27	To say or show something funny, to keep up communication with friends who don't live close to me, or to say something inspirational or thoughtful
1986	27	share what's going on with friends
1986	27	To keep friends updated
1986	27	For fun
1986	27	I no longer use Facebook but am providing info based on how I used to use it. I don't think Facebook makes us happier and is overall harmful to our mental well-being.
1986	27	to share with friends
1986	27	
1986	27	bitches
1987	26	To share my life with family and friends, or just for a laugh
1987	26	I don't use Facebook
1987	26	I post about current events, or things that happened to me that are funny, insightful, or memorable that I would normally share with friends if they were around.
1987	26	To keep record of my life to look back in the future
1987	26	for family
1987	26	
1987	26	
1987	26	About 50% because I feel I have something interesting to share and 50% a desire for attention/validation

1987	26	
1987	26	Updates because I want to share good news about whatever is going on in my life or the world. Photos, because they create good memories with the people that you share with, and sometimes it's funny to laugh at the good photos.
1987	26	To put my pictures somewhere. Also so people I don't often see (my family, high school and college friends) can see what I am doing.
1987	26	I try to be encouraging with what is going on in my life in hopes that it will brighten someone else's day.
1988	25	To share my life with people who care about what I'm up to
1988	25	To share information.
1988	25	so my family and friends can see what I am up to
1988	25	To keep family and friends involved or make them laugh
1988	25	
1988	25	To show others what I have done and to keep track of things I've done. It's like a scrapbook that's being updated throughout the years.
1988	25	I rarely post updates or photos of myself. I mostly use fb for groups and pages.
1988	25	To be hilarious. That is the only legitimate reason. I don't use it for politics or serious things.
1989	24	I don't
1989	24	I rarely post but when I do it is to show something unique and different I am doing at the time. Post maybe once or twice a month
1989	24	
1989	24	I don't have Facebook
1989	24	to let my friends know what I'm up to
1989	24	I rarely do.
1989	24	
1989	24	
1990	23	I don't
1990	23	To keep family and friends updated, because I moved out of state and don't get to see them very often.
1990	23	To share what's happening in my life with my friends
1990	23	to share with friends
1990	23	To let family and friends know what's new in my life
1990	23	
1990	23	
1990	23	Expression of myself
1990	23	I rarely do. Most often it's to share an article or important information.
1990	23	So my family and friends can see what I've been up to or thinking.
1990	23	I
1990	23	To share my experiences and keep my friends up to date.
1990	23	
1990	23	I post videos or music I think people will enjoy
1990	23	Archiving for personal storage.

1990	23	
1990	23	To save them online instead of on my computer where it can be lost, deleted, etc.
1990	23	To occasionally update people I don't talk to on a regular basis about what is going on in my life. Also so I can go back and keep track of when major events occurred.
1990	23	As a way to share my experiences with others
1990	23	To socialize.
1991	22	
1991	22	I don't usually. If I do, it is usually because the post or photo is funny or interesting.
1991	22	
1991	22	Because I have nothing better to do.
1991	22	
1991	22	Because it's easier for everyone to see them. Also you could start a meme!
1991	22	
1991	22	To stay in touch with friends and family I don't get to see very often
1991	22	To keep my posts and photos recent which helps stay in touch with friends.
1992	21	To share with family and friends
1992	21	Because my grandparents and family use it to see what's been going on in my life since I do not live in the same states as they do
1992	21	To share news or my thoughts with various friends/acquaintances.
1992	21	I enjoy having them in one place and being able to share with friends and family easily.
1992	21	I don't usually do so, but sometimes I want to express myself.
1992	21	
1992	21	to have access to the photos anywhere
1992	21	Sometimes it is to show off an accomplishment, such as good grades. Other times, it is to share my experiences, such as traveling.
1992	21	To make people laugh and so my friends/family know what is going on with my life, particularly those who live hours away.
1992	21	So I can give people an impression and help them get to know me.
1992	21	
1992	21	I'm afraid that if I don't document parts of my life, I'll forget all about it. I'll forget about the connections I've made and forget about the fun things I'm doing in college. I don't want to wake up when I'm 40 and not remember being a 20 year-old.
1992	21	To see what my friends think or to tell people what I'm doing.
1993	20	I want to let my friends and family know what's going on.
1993	20	It's fun
1993	20	for other people to know what I am up to
1993	20	I like to share amusing things that will entertain other people.
1993	20	I don't know
1993	20	Honestly for the attention, and hope that people will ""like"" what I have to post.

1993	20	once a month
1993	20	
1993	20	To say something that people will read and, for at least a moment, remember me.
1993	20	It's a way to keep in touch with other people and even news events. Especially if you're busy in real life, or just otherwise have trouble dealing with people.
1993	20	Mostly so my family and friends back home know how things are going.
1993	20	Mostly to spark conversations with people. It's a way to supplement daily conversations. When I tell a story I can say, ""Go see a picture of it on my Facebook!
1993	20	To show others how I am doing
1993	20	Because I like people to see my sexy boyfriend. P and I like to show people all the cute animals I have.
1994	19	to stay connected with friends I have who live hundreds of miles away
1994	19	
1994	19	To let people know what I've been up to if they haven't seen me in a while
1994	19	
1994	19	Because it is like a diary. It helps me to remember what I've done, where I had been and the people I had met.
1994	19	
1994	19	To let my friends and family know how I'm doing.
1994	19	To show what I'm up to
1994	19	I feel like telling people about what I am doing.
1994	19	
1994	19	to help remember certain events, to share things with my friends that will benefit them, and to boost myself to confidence and spread my network
1994	19	
1994	19	to get likes and say something I know people will read
1994	19	To communicate with those few people I actually know.

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