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Relationship of Facebook usage and Facebook belongingness to emerging adulthood's self-esteem and social identity

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ABSTRACT

RELATIONSHIP OF FACEBOOK USAGE AND FACEBOOK BELONGINGNESS TO EMERGING ADULTHOOD'S SELF-ESTEEM AND SOCIAL IDENTITY

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Northern Illinois University, 2015
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The purpose of this study was to examine possible relationships between emerging adults' involvement with Facebook and their sense of social identity and level of self-esteem. Based on the results that measured Facebook belongingness, self-esteem, Facebook identity, and social comparison, there were significant findings that suggested there is a relationship between the amount of time spent on Facebook and one's level of self-esteem, amount of time spent on Facebook and Facebook belongingness, as well as Facebook belongingness and Facebook identity. Further research needs to be done to evaluate differences in gender, race, and sexual orientation.

NORTHERN ILLINOIS UNIVERSITY

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RELATIONSHIP OF FACEBOOK USAGE AND FACEBOOK BELONGINGNESS TO
EMERGING ADULTHOOD'S SELF-ESTEEM AND SOCIAL IDENTITY

BY

MARY MARJORIE SCHUFREIDER

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A THESIS SUBMITTED TO THE GRADUATE SCHOOL
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Thesis Director:

J. Elizabeth Miller, Ph.D.

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CHAPTER 1

INTRODUCTION

Emerging adults are exposed to many influences that can affect their attitudes, behaviors, self-esteem, and confidence. The media, specifically, contributes to these influences through outlets such as television programs, music, gossip blogs, news websites, and social networking sites. Technology provides unlimited access to these media outlets. The increase in technology and access to technology has made media influences more prominent, with over 90% of college students having access to cell phones, laptops, and tablets equipped with wireless or broadband Internet (Smith, Raine, & Zickuhr, 2011). Additionally, more than 80% of these college students use their technological devices for social networking in the form of social media (Smith et al., 2011).

Phenomena of Social Media

Social media is defined as “forms of electronic communication through which users create online communities to share information, ideas, personal messages, and other content” (Merriam-Webster’s online dictionary, n.d.). Examples of these electronic communications include sites such as Pinterest, Tumblr, and Instagram. Social media sites are utilized by emerging adults to entice other users into communicating and connecting through shared pictures, videos, hobbies, and points of view. Women use social media slightly more than men and people ages 18-30 account for the majority of social media users (Duggan & Smith, 2014). The top three social media sites used by young adults ages 18-30 are Facebook, Twitter, and Instagram, with Facebook being the most popular social media site (Duggan & Smith, 2014).

Facebook is a social media site that allows users to create a profile detailing their self-identifying information such as one’s educational background, work history, hobbies, taste in

music, favorite sports team, and an array of other self-identifying information. A user's profile also typically includes a profile picture, which the user uploads by him or herself. Facebook also allows users to scan other people's profiles in order to find mutual friends, which aids in building online connections. Additionally, Facebook serves as a platform where users can post items that showcase and enhance a user's personality via photos, videos, locations, and URL links, just to name a few. Of the young adults who subscribe to Facebook, 63% use Facebook daily (Duggan & Smith, 2014), making Facebook number one in social media engagement. This study focuses solely on Facebook and not on other social media sites.

Current Facebook Statistics and Relevance

Facebook was developed by Harvard student Mark Zuckerberg in his university dorm room (Phillips, 2007). Anyone 13 or older with a registered email address to can become a Facebook member. Facebook has earned the top title as the number one social network site since 2009, beating out previous titleholder, MySpace (CNN Library, 2014). In October 2012, the number of Facebook users reached one billion, with one out of six people worldwide registered to a Facebook account. The United States has the most active involvement in Facebook, followed by Brazil and India (CNN Library, 2014). Access to Facebook has expanded beyond desktop computers and laptops, with more than 1.1 billion people accessing Facebook via a mobile device (Langer, 2014). Greater access to Facebook has contributed to an increase in posted content, which is exemplified by the 350 million photos uploaded every day to Facebook (CNN Library, 2014). Facebook is valued at about \$210 billion dollars (Langer, 2014), marking its significance, claim, and influence on today's society.

Unlimited Access to Facebook

Facebook can be accessed directly from the Internet or through its app. It can be accessed from technological devices that are equipped with Internet such as desktop computers, laptops, tablets, and smartphones. Over 90% of people ages 18-30 own or have access to a smartphone or laptop (Smith et al., 2011), which allows them unlimited access to Facebook. Unlimited access to Facebook means users have 24/7 access to other users' profiles. Constant access to Facebook allows subscribers to utilize many of the features offered through Facebook, such as online chatting, direct messaging, and gaming. This constant connection can make disconnecting from society and unplugging from external stimuli difficult to attain. The inability to disconnect is a factor in this study for measuring potential influences on emerging adults' self-esteem and social identity development.

Facebook and Stressors

Being the number one social networking site holds both positive and negative influence. Facebook allows users to utilize a "like" button, indicating, when pushed, that someone approves, agrees with, or simply likes what another user has posted on their account. Although there is no "dislike" button available on the social networking site, users and researchers alike have voiced concerns for some of their dislikes of the site and its potential negative influence on members. Smith (2014) compiled a list that reflects what users tend to dislike about Facebook. The research stated 36% of users had a disdain for others sharing too much information about themselves on Facebook (Smith, 2014), insinuating that people put too much unnecessary information about their lives onto the public platform. Additionally, 36% of users revealed they disliked others having the power to post things about another user without asking that other user's permission. An example of this would be someone uploading a group photo where one of

the members is embarrassed by his or her appearance and would prefer that picture not be uploaded. This could cause stress in a user if things are continually posted without approval, possibly destroying the user's character, appearance, or integrity. Possible stressors associated with Facebook have begun to become a topic of interest for researchers.

Belongingness and Facebook

Past research supports the idea that Facebook holds relevance over one's sense of belongingness, which is something that is further explored in this current study. Mabe, Forney, and Keel (2014) showcased the relationship between amount of exposure to Facebook and one's sense of belongingness to a socially accepted group. Their research exposed participants to Facebook for 20 minutes before taking a survey regarding body image. What they discovered was the longer women were exposed to Facebook, the more likely they were to develop anxiety and feel pressured to lose weight because of comparison of themselves to other "beautiful" women (Mabe et al., 2014). One potential explanation for these results is that prolonged exposure to Facebook can make users question their identity and whether they feel a sense of belonging with others. In this study in particular, the longer one spent on Facebook, the more one felt pressured to belong based on the social acceptance of thin women (Mabe et al., 2014).

The amount of time spent on Facebook begs the questions of whether too much time spent on Facebook produces a positive or negative sense of connectedness or belonging. Chou and Edge (2012) answered this question by examining a user's length of time spent on Facebook and the amount of content a user remembered from his or her time spent on Facebook. Results of this study supported the idea that the longer one stays logged onto Facebook, the better the user's memory of what he or she saw on it. Consequently, these users were more prone to remember positive messages and pictures on Facebook, which caused the user to perceive others as happier

than that user (Chou & Edge, 2012). The longer one's Facebook use, the more truth users put to this idea that others are happier in their lives than that user. This impression that others have greater lives than those who are browsing their Facebook profiles causes users to feel life is not fair and that they do not fit in with these "happy" people on Facebook (Chou & Edge, 2012). A cycle can then develop where users maintain their sense of disconnection from society by spending more time perusing others' profiles on Facebook.

Social Identity and Facebook

Facebook's relevance to social identity is supported by the social exchange theory, which can be related to one's use of Facebook by examining one's interactive behavior on Facebook. Every like on a photo or comment on a status translates into patterned behaviors, which garner social rewards. The reward in having Facebook users connect to others' profiles enhances the feeling of fitting in with a group. Belongingness to a group can promote positive social identity. Social identity refers to one's perceived sameness or belonging to a group, in addition to defining oneself on behalf of the group (Ashforth & Mael, 1989). To socially identify means one experiences the positive and negative successes and failures of a group. It is a desire to encompass the characteristics and traits of a group. Additionally, to socially identify, one is provided with a sense of belonging and comfort (Ashforth & Mael, 1989). It is possible some people join Facebook to achieve some sort of social identity.

Self-Esteem and Facebook

Self-esteem is another factor that is researched in this study in relation to how much time one spends on Facebook. Facebook subscribers choose what they want displayed on their profile, and Facebook's Timeline keeps a record of all data a user has posted on Facebook, which is then publically displayed to all the user's friends. The Timeline challenges the users to think about

how they want their life displayed, by whom they want it to be accessed by, and for what purpose (van Dijck, 2013). The creation of the Facebook Timeline allows users to personally brand themselves, giving users the ability to consciously decide how they want to be represented and by whom they want to be noticed (van Dijck, 2013).

The bombardment of information presented whenever someone logs onto Facebook can be overwhelming. This flood of information on Facebook, including status updates, video posts, picture uploads, and miscellaneous announcements, is the basis for Chen and Lee's (2013) study that looked at Facebook's information overload and its effect on a user's psychological state, specifically one's self-esteem. They surveyed college students and their Facebook interactions, such as liking, sharing, and commenting on the social platform. Results found more frequent Facebook interaction, including profile browsing, content posting, and message sending, was positively correlated with greater psychological distress (Chen & Lee, 2013). In relation to self-esteem, this study showed Facebook interactions and self-esteem were indirectly related via communication overload, meaning the more users became overloaded with communication, the more their self-esteem decreased. (Chen & Lee, 2013). A possible explanation for this may be that users become aware of their shortcomings based on all the information they observe on Facebook, resulting in a lower sense of self-esteem (Gonzales & Hancock, 2010).

Gonzales and Hancock (2010) tested the self-esteem of a group of college students by having them either view their own Facebook profile page or look at themselves in a mirror. After a brief exposure to one of the groups, each participant was asked to fill out a survey, which included items from the Rosenberg Self-Esteem Scale. Gonzales and Hancock (2010) concluded from their results that those who viewed their own profile page on Facebook reported higher levels of self-esteem than those exposed to a mirror. The rationale behind these results was

through selective self-presentation, users were able to take their time in choosing what to display on their Facebook profile, essentially creating their ideal self in a process which encourages self-presentation (Gonzales & Hancock, 2010). The extra care put into one's profile page is thought to raise one's self-esteem because the user is putting out his or her best self. This is different than those who looked in the mirror because users could not change their mirrored appearance like they could on Facebook, leading to a decrease in self-esteem (Gonzales & Hancock, 2010).

Social Comparison and Facebook

Self-esteem can also be related to Facebook by the ability to socially compare one's profile to others. Steers, Wickham, and Acitelli (2014) discovered a correlation between social comparisons via Facebook and its impact on one's level of self-esteem while manipulating the amount of time spent on Facebook. Results provided evidence that people's self-esteem declined the more time users spent socially comparing themselves to others on Facebook. The longer one spent on Facebook allowed for more time to be used in comparing the user to others whether it be, for example, in appearance, clothing style, taste of music, love life, or social calendar. Longer time periods allowed for users to add up their social comparisons, which caused users to begin to feel poorly about themselves, their self-worth, and their self-image (Steers et al., 2014).

Emerging Adulthood

Measuring the relationship Facebook has on its users and their sense of self-esteem, social identity, and belongingness is of particular interest in this study, specifically its relationship on emerging adulthood. Emerging adulthood refers to a developmental period for those ages 18-25 (Arnett, 2000). A high level of experimentation and identity exploration characterizes this time period, with focuses on love, work, and one's life direction. It is

distinguished from adolescence because people who fall into emerging adulthood are vastly less developmentally dependent (Arnett, 2000). Emerging adulthood also differs from adulthood in the sense that those ages 18-25 have yet to take on the full responsibilities of adulthood.

Additionally, emerging adulthood is centered on change and exploration of one's life course (Arnett, 2000). This time period holds relevance to this study as it plays a role in understanding how influential Facebook can be with those searching to solidify their identity and sense of self. It is useful in helping to determine if there is an age range that is more susceptible to potential pressures from Facebook usage.

Purpose of This Study

This study addressed the relationship between the amount of time one spends on Facebook to emerging adults' self-esteem, impact on their social identity, and sense of belongingness. It also addressed the relationship between one's sense of belongingness to one's self-esteem and social identity. The sample for this study consisted of college students, ages 18-25. The amount of time spent on Facebook and one's level of Facebook belongingness served as the independent variables, while self-esteem and social identity served as the dependent variables. Social comparison was also measured in relation to self-esteem and social identity, to add another layer of analysis.

R₁: Does the amount of time spent on Facebook have a relationship on emerging adulthood's level of self-esteem?

R₂: Does the amount of time spent on Facebook have a relationship on emerging adulthood's Facebook identity?

R₃: Does the amount of time spent on Facebook have a relationship on emerging adulthood's level of social comparison?

R₄: Does the amount of time spent on Facebook have a relationship on emerging adulthood's level of Facebook belongingness?

R₅: Is there a relationship between Facebook belongingness and emerging adulthood's level of self-esteem?

R₆: Is there a relationship between level of Facebook belongingness and emerging adulthood's Facebook identity?

R₇: Is there a relationship between level of Facebook belongingness and emerging adulthood's level of social comparison

R₈: Is there a relationship between Facebook identity and self-esteem?

CHAPTER 2

REVIEW OF LITERATURE

The absorption of external stimuli related to self-esteem and social identity for emerging adults, ages 18-25, in college who utilize social networking, specifically Facebook, can be further evaluated by first understanding the factors that contribute to the development of one's self-identity and self-esteem.

Development of Self and Identity

The self can be defined and developed through a variety of definitions dependent on the perspective taken to understand the self. When taking a psychological approach, the self changes from an abstract concept to that of an object, which can be manipulated through societal interactions (Mead, 1913). Social processes that include individual and collective gestures help develop one's self. These gestures can take the form of verbal interactions, such as face-to-face conversations, and nonverbal interactions. Nonverbal interactions include gestures such as a handshake, eye glance, posture, and body language. These nonverbal interactions can portray feelings of acceptance or disapproval, which influence what parts of the self an individual chooses to keep, manipulate, or discard (Mead, 1913).

Cooley (1906) believed the views and opinions of others could build, change, and maintain one's self. His idea of the "looking glass self" could be developed through combining how an individual imagines he or she appears to others and the judgments the individual imagines others make of that individual (Cooley, 1906). These two variables of the self cumulate and help individuals develop an idea of who he or she is by instilling feelings within an

individual, which determines how he or she chooses to outwardly portray oneself. These feelings can include pride, happiness, guilt, or shame (Cooley, 1906).

Goffman (1959) provided an alternative measure for defining the self by claiming the self forms on the basis of how an individual chooses to present oneself, which manifests itself to reveal traits that speak highly of an individual, fit harmoniously within society, or defraud, confuse, or insult others. In some aspect, according to Goffman (1959), the self includes a certain amount of control on behalf of the individual for how he or she wishes to define him or herself. Therefore, the development of the self places some of its foundation in its interest to have some type of control over others and others' responsive treatment.

Development of Self and Identity in Relation to Emerging Adulthood

Erikson (1968) postulated that identity is shaped within a period of one's young life through the crisis of identity versus role confusion. The major question asked in this phase of life is, "Who am I?" During emerging adulthood, emerging adults are encouraged to test their newfound freedom and independence by trying out different roles and activities in the hopes that they begin to develop a strong sense of self and personal identity (Erikson, 1968). This stage of life can be dangerous if proper support and encouragement is not relayed to emerging adults who are experimenting and not receiving validation for whom they choose to become.

Identity within the phase of identity versus role confusion can also be shaped through one's culture and society, with individuals wanting to belong and fit in with society. Through experimentation of different social opportunities found within social groups, work settings, and educational placements, to name a few, the self has the capability of being solidified and engrained into an individual's personal identity (Erikson, 1968). If one completes this stage of life successfully, that individual will have developed a strong identity and sense of life direction.

This has the potential to boost one's self-esteem and confidence following the next phase of life. To not successfully complete this stage results in role confusion, which may cause individuals to become unsure of their placement within society because of their uncertainty of their personal identity (Erikson, 1968). This can leave individuals feeling confused about their future and where they belong.

Development of Self-Esteem

Identity and self-esteem differ in the sense that identity is defined as who a person perceives him or herself to be, whereas self-esteem is defined through self-worth and how one chooses to value him or herself (Gonzales & Hancock, 2010). Maslow (1943) considered self-esteem to be one of the essential needs within his hierarchy of needs, claiming self-esteem is based on the need for a stable, firm sense of self-worth. He also stated self-esteem is influenced by receiving respect from others, making it possible to then further define self-esteem through confidence, respect of others, and the need to be a valued individual (Maslow, 1943). To satisfy one's need for self-esteem means one feels useful and is a necessity to the world. To not achieve the need for self-esteem can result in feelings of inferiority, weakness, and helplessness (Maslow, 1943).

Development of Self-Esteem in Relation to Emerging Adulthood

Emerging adulthood plays an important part in developing self-esteem, as self-esteem is typically tested during this life stage (Arnett, 2000). Trzesniewski, Robins, Roberts, & Caspi (2004) found self-esteem tended to decrease in adolescence due to puberty, school transitions, and growing social complexities. During this life stage, youths began to develop the ability to think abstractly, which presented the opportunity for them to be more mindful of failed expectations and missed opportunities (Trzesniewski et al., 2004). With research backing the

idea that self-esteem is a stable, trait-like construct that tends to remain the same over one's lifespan (Robins & Trzesniewski, 2005), the need for development of positive self-esteem is crucial to the future development of those transitioning into emerging adulthood.

Social Identity, Self-Esteem, and Belongingness in Relation to Facebook

Belongingness and Its Relation to Identity

To belong to a group, whether it is a religious organization, political group, sorority, after-school club, or sport team, means one shares a particular interest, hobby, value, or opinion with others. Recent studies have delved further into belongingness and whether it has any impact on how individuals define or shapes their identity, in addition to any other additional correlations between the two variables of belongingness and identity. For purposes of this paper, belongingness and connectedness will be used interchangeably.

The need for belonging is the primary motivation for assuming a social identity in a group (Brewer, 1991). To belong means one is entitled to a certain amount of connectedness to others. Lee (1998) concluded connectedness provides people with a social lens with which to perceive the world in which they live. This means to belong to a group and feel connected allows individuals to witness and observe the actions of others and interpret these actions in order to gain a stronger sense of connectedness with others through shared interests. For example, supporting a sports team by going to games with other fans places individuals in an arena where the majority of the patrons feel a sense of connectedness due to cheering on the same team. Engaging in chants and clapping when one's favorite team scores showcases behaviors that are accepted and encouraged in order to maintain one's sense of connectedness.

Additionally, individuals with a high sense of connectedness are continuously motivated to seek relationships to build a sense of belonging (Kohut, 1984; Lee & Robbins, 1995). In

keeping with the sports theme, sport fans tend to seek out others who support the same team so that they can engage in bonding, such as watching a game together, which can increase one's sense of belonging.

Belongingness and Its Relation to Social Identity and Self-Esteem

High levels of connectedness in women have been correlated with higher levels of social identity and self-esteem (Lee, 1998). It has also been shown to better help individuals manage their emotions, which can be resourceful in stressful situations (Lee, 1998). To elaborate, if an individual is experiencing distress from, for example, loss of a job, that person may seek comfort from a group in which they feel they belong. The support they receive from these groups where the level of connectedness is high can help facilitate keeping the individual's overwhelming negative feelings at bay. By helping individuals manage their emotions, high levels of connectedness can also lessen and reduce one's low level of self-esteem (Lee, 1998). It can also assist in building high levels of interpersonal trust. Having a high level of belongingness aids in fostering confidence in social situations, but low levels of connectedness can cause individuals to experience lower levels of self-esteem, which in turn may influence individuals to avoid social situations that could possibly raise their level of belongingness (Lee, 1998).

Feinstein and colleagues' (2013) research allows for further exploration of the relationship between social comparison, self-esteem, and belongingness in regards to Facebook. They researched the relationship between social comparison, rumination, and self-esteem and discovered social comparison on Facebook puts an individual at risk for rumination about what he or she envies regarding what is posted on others' accounts (Feinstein et al., 2013). The rumination associated with these social comparisons lead to the development of either a positive

or negative self-esteem, dependent on if a user felt a sense of connectedness to whatever he or she ruminated about.

The foundation behind why Facebook can be influential in terms of self-esteem, social comparison, and social identity in emerging adulthood can be exemplified through theories such as social exchange and social development (Chibucos, Leite, & Weis, 2005; Vygotsky, 1978). These theories reinforce the idea that individuals enjoy having perceived control over how they choose to direct their life development.

Social Exchange Theory and Social Networking

The fundamental principle of social exchange theory is humans choose behaviors in social situations that maximize the likelihood of matching self-interests in these social scenarios (Chibucos et al., 2005). It can be assumed from this theory that behaviors serve a purpose, and that purpose is to discover and bond over commonalities between humans. Similarities tend to bring people together, increasing a human's chance to cash in on social rewards. This theory also provides an opportunity for reciprocal dyadic exchanges in order to achieve a level of power differentiation that aids in the betterment of oneself (Blau, 1964). Additionally, this theory assumes that people are rational and partake in continual calculations of costs and benefits when faced with a social setting (Emerson, 1976; Hormans, 1958). These calculations lead to social decisions, which transform into patterned social interactions. Behaviors are reinforced through societal "rewards" such as praise, laughter, and interests from others. Maximizing human profits fulfills basic human needs (Chibucos et al., 2005).

An example of social exchange theory in relation to face-to-face social networking is choosing to associate oneself with the "popular kids" at school in order to be accepted, despite not having anything in common with the "popular kids." By choosing to hide one's true self in

order to fit in with the “popular crowd,” one is accepting the cost to sacrifice their happiness and comfort with their identity in order to be socially accepted. One does this in order to prevent being bullied for being different from the socially accepted norm. In this example, the benefit of social protection outweighs the cost of giving up one’s true identity in order to be accepted by their peers.

Emerging adults engage in many social behaviors relevant to their development in interpersonal relationships and ongoing development of self. These behaviors contribute to the development and completion of important milestones in their emerging adulthood such as dating, leaving home for college, finding a job, maneuvering one’s newfound freedom, and enhancing one’s social life. Social exchange theory plays a role in which behaviors emerging adults choose to partake in order to gain the most benefit for their efforts. Sites such as LinkedIn, Match.com, and Twitter provide a platform for social exchange behaviors to play out by connecting emerging adults socially through their work, dating life, and social life. Those with a dating profile can filter out potential matches by one’s age, financial status, religion, hobbies, and location. This allows users to calculate potential daters’ cost to benefit ratio, maximizing the chances for users to find their perfect dating match. Other social networking sites allow interactions between users that increase one’s ability to personalize and expand their benefits in their social life. Every message, notification, friend request, favorite, or “like” on sites such as Twitter and Facebook is done with anticipation that the receiving end will reciprocate, increasing the user’s societal “rewards.” Connecting with strangers who hold similar interests or jobs allows users to control their social interactions so that they reap the benefits.

Social Development and Social Networking

Social development theory focuses on culture and social interactions as proponents of cognitive development, which can account for one's self-esteem and sense of identity (Vygotsky, 1978). Social developmental theory also emphasizes one's environment as a powerful leader in developing one's cognitive abilities. In relation to social networking, social development theory insinuates that users develop cognitions through the people they network with and the interactions they have online. Social networking is a place where social classes and backgrounds are mixed, leaving it up to the user to decide with whom to interact. Users typically stay within their comfort zone when faced with a decision to stay or stray from their social environment (Hirschi, 1969). Interacting with users who share similarities would, theoretically, promote positive or neutral feelings of belonging and a positive sense of self-identity. If a user chooses to interact with someone outside of their normal environment on a social networking site, they may develop distressful cognitions related to not syncing with others. This type of distress could lead to negative effects on the user's self-esteem and identity. In fact, the term "Facebook depression" has recently been coined to explain the phenomenon that many young adults feel when they spend a significant amount of time on Facebook (Jelenchick, Eickhoff, & Moreno, 2013). According to the theory of social development, if Facebook users attempt to connect with others outside of their environment, they may feel distress from lack of acceptance from their peers, which could affect their self-esteem. Social networking and social media provide a detailed look into how social development theory and social exchange theory can be applied.

CHAPTER 3

METHODOLOGY

This study used a survey research design and included quantitative research in the form of a self-administered questionnaire. The study was designed to examine the relationship between amount of time spent on Facebook, self-esteem, Facebook identity, and Facebook belongingness. It also examined the relationship between Facebook belongingness, self-esteem, and Facebook identity. Pearson correlations were used to decipher the directional relationships between the variables. The alpha score or p-value was set at $p < 0.05$.

Procedure

Convenience sampling was used to recruit participants from Northern Illinois University's (NIU) campus. College students, ages 18-25, both males and females, were asked to serve as participants and subjects were recruited from a range of undergraduate classes. The investigator of the study randomly selected a number of undergraduate classes from all departments during the Spring 2015 semester and sent the professor an email explaining the study and requested the professor send the survey link to his and her students. Due to low participation, the investigator of the study sent the same email to all professors with undergraduate classes in the School of Family, Consumer, and Nutrition Sciences (FCNS) during the Summer 2015 and Fall 2015 semesters. Additionally, the investigator of the study presented the study in two large, auditorium-sized FCNS undergraduate classes. The survey for this study was posted in these classes' Blackboard accounts. Participation was on a voluntary, anonymous,

and informed-consent basis and was not a requirement in any of the classes.

The online questionnaire addressed informed consent, voluntary participation, right to discontinue participation without any consequences, right to confidentiality, estimated time to complete questionnaire, and potential risks to participating. The informed consent highlighted the opportunity for participants to win one of three \$15 gift cards to Target. If subjects wanted to be eligible for the gift card drawing, they needed to provide their email address at the end of the questionnaire, which was kept confidential and only used for the purpose of drawing names and contacting winners. Permission to use human subjects was obtained through the Institutional Review Board (IRB) at Northern Illinois University.

Sample

The sample for this study (N = 166) was comprised of Northern Illinois University students: 146 females (88%), 19 males (11%), and one participant who indicated they did not wish to identify their gender (1%). Participants who did not fall into the 18-25 age range were excluded from this study. Of the participants who fell into the 18-25 (93%) age range, the majority identified their year in college as Sophomore (29%), Junior (37%), or Senior (25%). The sample predominantly identified as straight (94%), single (93%), and White (62%). Other ethnicities included in this sample were Hispanic (11%), Black (18%), and Other, not indicated (5%). The types of activities participants engaged in when using Facebook ranged from posting photos (84%); sharing articles, links, etc. (67%); posting status updates (60%); browsing other members profiles (75%); playing games (12%); sharing messages (54%); marketing (6%); and other (5%). Additionally, the participants' majors included, most notably, Nursing, Child Development, Health Science, Early Childhood Education, and Communication. Characteristics of the sample are displayed in Table 1.

Table 1

Sample Characteristics

Characteristic	Men (%)	Women (%)	Total (%)
<i>Gender</i>			
Men	--	--	19 (11%)
Women	--	--	146 (11%)
<i>Age</i>			
18-25	19 (100%)	146 (100%)	166 (100%)
26-30	0 (0%)	0 (0%)	0 (0%)
31-35	0 (0%)	0 (0%)	0 (0%)
36 or older	0 (0%)	0 (0%)	0 (0%)
<i>Race</i>			
White, non-Hispanic	12 (63%)	91 (62%)	103 (62%)
Hispanic/Latino	2 (11%)	16 (11%)	18 (11%)
American			
Indian or Alaska Native	1 (5%)	0 (0%)	1 (1%)
Asian	0 (0%)	3 (2%)	3 (2%)
Black or African	0 (0%)	30 (21%)	30 (18%)
American			
Native Hawaiian or	2 (11%)	0 (0%)	2 (1%)
Other Pacific Islander			
Other, not indicated	2 (11%)	6 (4%)	8 (5%)
<i>Sexual Orientation</i>			
Straight	17 (89%)	139 (95%)	156 (94%)
Gay	2 (11%)	0 (0%)	2 (1%)
Lesbian	0 (0%)	0 (0%)	0 (0%)
Bisexual	0 (0%)	4 (3%)	4 (2%)
Pansexual	0 (0%)	1 (1%)	1 (1%)
Queer	0 (0%)	0 (0%)	0 (0%)
Asexual	0 (0%)	1 (1%)	1 (1%)
I prefer not to answer	0 (0%)	1 (1%)	1 (1%)
Other	0 (0%)	0 (0%)	0 (0%)
<i>Marital Status</i>			
Single	18 (95%)	135 (92%)	154 (93%)
Married	0 (0%)	2 (1%)	2 (1%)
Widowed	0 (0%)	0 (0%)	0 (0%)
Divorced	0 (0%)	1 (1%)	1 (1%)
Cohabiting	1 (5%)	8 (5%)	9 (5%)
Separated	0 (0%)	0 (0%)	0 (0%)
<i>Year in College</i>			
Freshman	1 (5%)	3 (2%)	4 (2%)
Sophomore	7 (37%)	41 (28%)	48 (29%)
Junior	5 (26%)	56 (38%)	62 (37%)
Senior	6 (32%)	35 (24%)	41 (25%)
Other	0 (0%)	11 (8%)	11 (7%)

Instruments

The Facebook Intensity Scale

The Facebook Intensity Scale (Ellison, Steinfield, & Lampe, 2007) was split into two subscales to measure Facebook frequency and one's emotional connection to Facebook. The first subscale focused on amount of time spent on Facebook and was measured by asking, "In the past week, on average, approximately how many minutes per day have you spend on Facebook?" Participants answered by checking one of six prescaled ranges that began at less than 10 minutes and ended at more than 3 hours. The second subscale measured one's emotional connection to Facebook, which was labeled Facebook belongingness. This subscale was scored via a series of Likert-scale attitudinal questions (Ellison et al., 2007). Questions that measured one's emotional connection included, "I am proud to tell people I am on Facebook," "I would feel sorry if Facebook shut down," and "I feel out of touch when I haven't logged onto Facebook for awhile." All of these emotional connection questions were rated on a scale from 1 to 4, with 1 symbolizing "strongly disagree" and 4 symbolizing "strongly agree." The Cronbach's alpha for this emotional connection measure was .80. See Appendix B.

Rosenberg's Self-Esteem Scale

Rosenberg's (1965) Self-Esteem Scale measured one's general feelings about his or herself via a 4-point scale ranging from "strongly agree" to "strongly disagree." "Strongly agree" was assigned 4 points, "agree" 3 points, "disagree" 2 points, and "strongly disagree" 1 point. Questions used to measure self-esteem included, "At times I think I am no good at all," "I feel I do not have much to be proud of," and "I wish I could have more respect for myself." The Rosenberg Self-Esteem Scale is a solid measure of concurrent, predictive, and construct validity (Rosenberg, 1979). The Cronbach's alpha for this ten-item scale was .90. See Appendix C.

Facebook Identification Scale

The Facebook Identification Scale was adapted from the 12-question Social Identification Scale, which measured social identity (Cameron, 2004). This scale was made up of three subscales: in-group ties, cognitive centrality, and in-group affect. Scoring was measured through a 6-point Likert-scale with “1” equating to “strongly disagree” and “6” referring to “strongly agree. An example of a question within the “in-group ties” subscale was, “I feel strong ties to others in my social group.” An example of a question within the “centrality” subscale was, “In general, being a member of a social group is an important part of my self-image.” “In general, I’m glad to be a member of a social group” was an example question from the “in-group affect” subscale (Cameron, 2004). To better fit what was being measured in this study, each question in this scale substituted “social group” for “Facebook.”

After adapting the scale to better mesh with what was being measured in this study, further revisions were made to cut the scale in half. Six items were taken out that did not cluster well together in measuring Facebook identity. These six items were removed to better stabilize the scale for its intended measurement. The questions that were removed from this study include, “Overall, being a member of Facebook has very little to do with how I feel about myself,” “The fact that I am a member of Facebook rarely enters my mind,” “I am not usually conscious of the fact that I am a member of Facebook,” “I often regret that I am a member of Facebook,” “I do not feel good when I think about myself as a member of Facebook,” and “Just thinking about the fact that I am a member of Facebook sometimes gives me bad feelings.” Removing these six items consolidated this scale to six items, with a Cronbach’s alpha of .81. See Appendix D.

Social Comparison Scale

The Social Comparison Scale measured one's perception of social rank and social standing through answering how one feels in comparison to others on a scale of 1 to 10 between 11 bipolar constructs (Allan & Gilbert, 1995). Each question requested participants to rank themselves in relation to others. An example of this scale asked, "In relationship to others, I feel...left out or accepted." Answers closer to 1 indicated one feels more left out in relation to others, while answers closer to 10 indicated one feels more accepted in comparison to others (Allan & Gilbert, 1995). The Cronbach's alpha for this 11-item scale was .93. See Appendix E.

CHAPTER 4

RESULTS

Relationships between variables were analyzed using a correlational design. Variables such as time spent on Facebook, levels of self-esteem, levels of social identification to Facebook, levels of social comparison, and levels of Facebook belongingness were examined to determine if a suggested relationship between any of the variables was significant.

Facebook Usage

Eighty-six percent of the participants who partook in the study indicated they had an active Facebook account at the time they took the survey. Of the 30 participants (14%) who indicated they did not have an active Facebook account at the time they took the survey, 27 (93%) marked they had previously been a member of Facebook. The reasons for why these participants deactivated their Facebook accounts range from not finding Facebook useful (26%), deactivation on a temporary basis (52%), and other (22%), citing Greek life recruitment as the reason. The complete list of reasons for why participants deactivated their Facebook accounts can be found in Table 2.

Table 2

Reasons Why Participants Deactivated Their Facebook Accounts

Reason	Total (%)
Account was hacked	3 (11%)
I did not find Facebook useful	7 (26%)
I do not understand how to use Facebook	1 (4%)
I spend too much time using Facebook	4 (15%)
I get too many emails, invitations, and requests	0 (0%)
I do not feel safe on Facebook	1 (4%)
My deactivation is on a temporary basis	14 (52%)
I have a privacy concern	3 (11%)
Other	6 (22%)

The main means to access Facebook were through one's smartphone (95%) and one's laptop (73%). The majority (57%) of participants have more than 400 friends on Facebook and spend on average anywhere between 10 minutes to 2 hours daily on Facebook (see Figure 1 and Figure 2). Participants indicated they use Facebook for an assortment of reasons. The number one response for why participants engage in Facebook was to post pictures (84%), followed by browsing other members' profiles (75%). A complete list of reasons why participants engage in Facebook can be found in Figure 3.

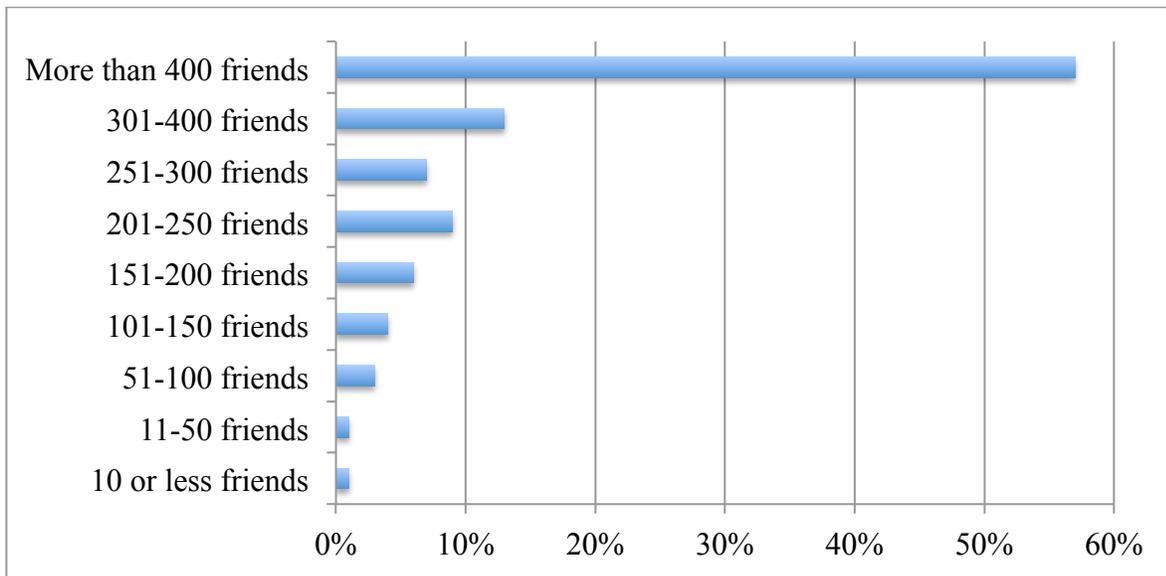


Figure 1. Total Number of Facebook Friends

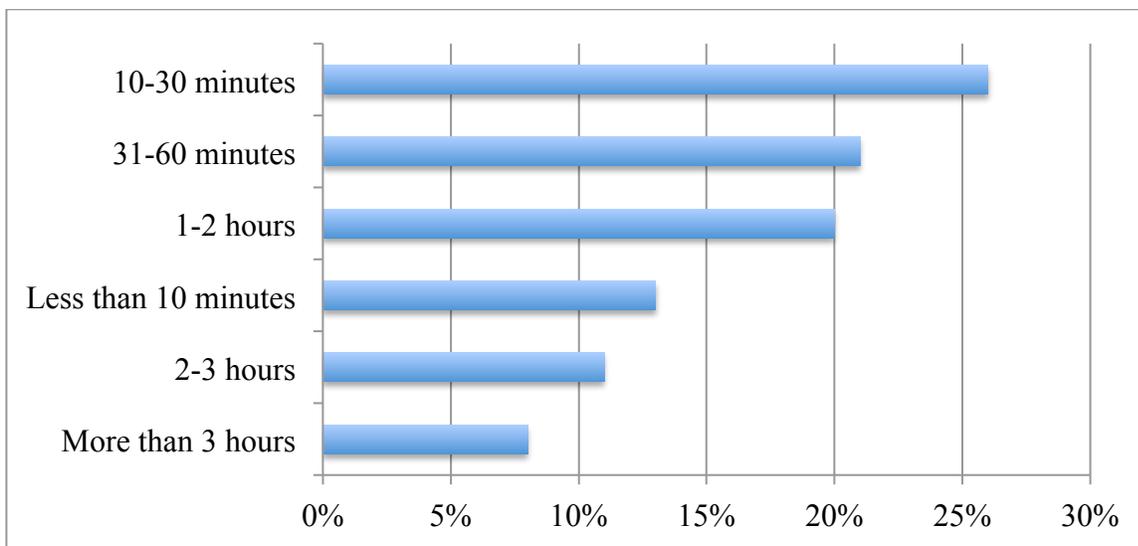


Figure 2. Average Amount of Time Spent on Facebook

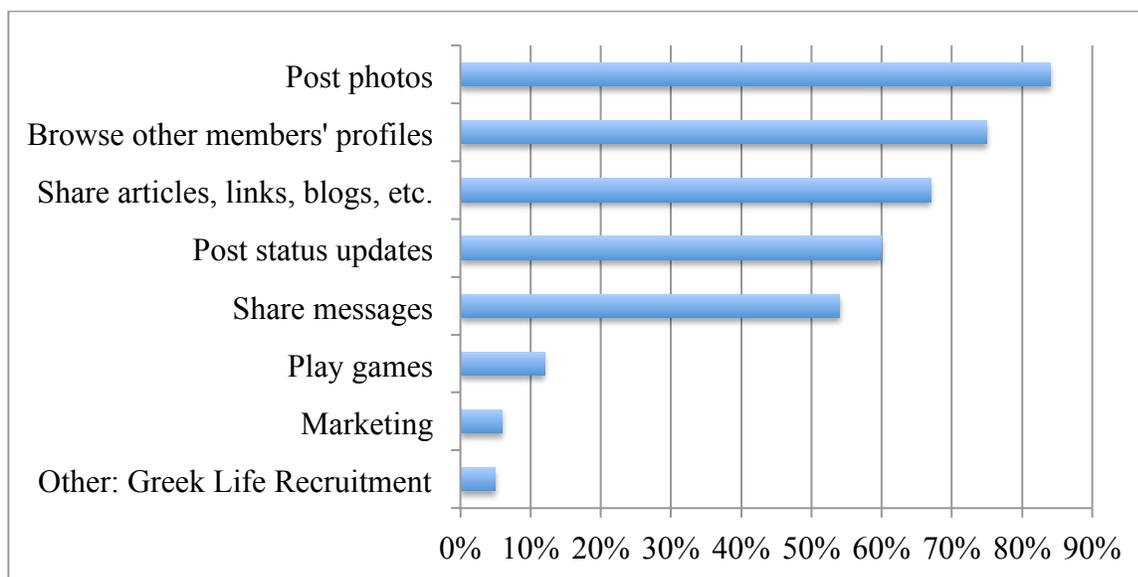


Figure 3. Reasons Why Participants Engage in Facebook

According to this study's results, the average user has more than 400 Facebook friends, spends about 30-60 minutes on Facebook each day, and mainly uses Facebook to post photos, browse other members' profiles, and share articles, links, blogs, etc. These results beg the question of whether the number of Facebook friends one has can be influential to one's perceived self-esteem, identity, and belongingness. Do more Facebook friends mean more opportunities for a user to compare profiles, contributing to one's self-esteem or identity? Similarly, does the amount of time on Facebook hold significance in other aspects of one's identity? Last, the reasons why people engage in Facebook relate back to Chen and Lee (2013) who stated these reasons are a contributing factor in a Facebook user's low sense of self-esteem. More research is needed to solidify the significance of these results.

Effect of Time on Variables

R₁: Does the amount of time spent on Facebook have a relationship on emerging adulthood's level of self-esteem? A significant, negative correlation was found between the amount of time spent on Facebook and one's level of self-esteem, $r = -.17, p = .05$.

R₂: Does the amount of time spent on Facebook have a relationship on emerging adulthood's Facebook identity? No significant relationship was found between amount of time spent on Facebook and one's Facebook identity, $r = .06, p = .05$.

R₃: Does the amount of time spent on Facebook have a relationship on emerging adulthood's level of social comparison? No significant relationship was found between amount of time spent on Facebook and one's tendency to socially compare, $r = -.12, p = .05$.

R₄: Does the amount of time spent on Facebook have a relationship on emerging adulthood's level of Facebook belongingness? A positive relationship was found between amount of time spent on Facebook and Facebook belongingness, $r = -.41, p = .05$.

A correlation table for these results can be found in Table 3.

Table 3

Correlation Table of Time

<i>Variable</i>		Time Spent on Facebook
Facebook Belongingness	Pearson Correlation	.405**
	Sig (2-tailed)	.000
	n	174
Social Comparison	Pearson Correlation	-.117
	Sig (2-tailed)	.132
	n	166
Self-Esteem	Pearson Correlation	-.166*
	Sig (2-tailed)	.032
	n	167
Facebook Identity	Pearson Correlation	.064
	Sig (2-tailed)	.413
	n	168

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

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

Effect of Facebook Belongingness on Variables

R₅: Is there a relationship between Facebook belongingness and emerging adulthood's level of self-esteem? No significant relationship was found between Facebook belongingness and one's level of self-esteem, $r = -.03$, $p = .05$.

R₆: Is there a relationship between level of Facebook belongingness and emerging adulthood's Facebook identity? A significant, positive relationship was found between Facebook belongingness and Facebook identity, $r = .34$, $p = .05$.

R₇: Is there a relationship between level of Facebook belongingness and emerging adulthood's level of social comparison. No significant relationship was found between Facebook belongingness and one's tendency to socially compare, $r = .01$, $p = .05$.

A correlation table of these results can be found in Table 4.

Table 4

Correlation Table of Facebook Belongingness

<i>Variable</i>		Facebook Belongingness
Facebook Belongingness	Pearson Correlation	--
	Sig (2-tailed)	--
	n	--
Social Comparison	Pearson Correlation	.009
	Sig (2-tailed)	.909
	n	166
Self-Esteem	Pearson Correlation	-.031
	Sig (2-tailed)	.692
	n	167
Facebook Identity	Pearson Correlation	.339**
	Sig (2-tailed)	.000

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

Facebook Identity and Self-Esteem

R₈: Is there a relationship between Facebook identity and self-esteem? A significant, negative correlation was found between one's level of self-esteem and one's sense of social identity $r = -.22, p = .01$. A correlation table of this result can be found in Table 5.

Table 5

Facebook Identity and Self-Esteem

<i>Variable</i>		Facebook Identity
Self-Esteem	Pearson Correlation	-.224**
	Sig (2-tailed)	.003
	n	168

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

Results Summary

Seven correlations were run on time and belongingness, in addition to one correlation between self-esteem and Facebook identity. The significant findings suggested those who spent more time on Facebook tended to exhibit lower levels of self-esteem. Another suggestion was the higher one's self-esteem level, the less likely they were to spend a significant amount of time on Facebook. A positive relationship between amount of time spent on Facebook and Facebook belongingness meant the longer one uses Facebook, the more likely they are to feel a strong sense of belongingness to Facebook. Additionally, results suggested the higher one's self-esteem, the less likely one was to socially identify with Facebook. The other side of that suggested the more one socially identified as a member of Facebook, the lower one's level of self-esteem.

The degree to which people were spending their time, about 30-60 minutes a week, with a community of over 400 friends, engaged in activities such as profile browsing and photo sharing needs to be looked at more. It begs the question: How can the use of Facebook hold

significance in the development of various life characteristics? Does the relationship between Facebook time and self-esteem stand true for other age ranges? Is Facebook belongingness as important for those younger and/or older than the age group studied here? Are there other aspects of Facebook such as Facebook advertisements that hold some influential power over one's self-esteem and identity development? With little research existing on items such as the ones listed here, the opportunity to expand on literature in this field is exciting and encouraging.

CHAPTER 5

DISCUSSION

Facebook has revolutionized the ways in which society portrays its sense of individualism while still maintaining close ties to collective norms. Keeping up communication with friends via status posting, picture sharing, and member browsing are some of the key reasons people use Facebook (Pempek, Yermolayeva, & Calvert, 2009). Another key use of Facebook involves identity expression, allowing members to create an online version of themselves that highlights their individualism through sharing information such as one's religion, work, and political ideology (Pempek et al., 2009). Unlimited access to members' profiles allows people the opportunity to learn more about a person through their pictures, messages, and content posted on their account. It also allows people the chance to understand and interpret societal trends and norms.

How this constant connection affects a person's mental health and well-being is something that needs to be explored further. While some studies have resulted in findings that showcase a positive relationship between Facebook usage and one's well-being and life satisfaction (Valenzuela, Park, & Kee, 2009), others provide research that supports the idea that Facebook usage can have a detrimental effect on one's psychological well-being (Huang, 2010).

Significant results of this study support previous research that found relationships between the variables studied in this study and Facebook. The significant positive relationship between amount of time spent on Facebook and level of Facebook belongingness is supported by Seidman's (2013) research that postulated belongingness as a motivation for using Facebook. It

fulfilled a user's need to feel connected and provided a sense of security. Belongingness on Facebook was found to be useful, especially for those who struggled to connect offline (Seidman, 2013). Additionally, the significant relationship between amount of time spent on Facebook and one's level of self-esteem adds to previous research that self-esteem was related to greater online activity (Mehdizadeh, 2010).

Further research is needed to provide support for the significant relationship between Facebook identity and Facebook belongingness. Little research is currently available regarding these variables, which should encourage investigators to further develop research in these areas.

Implications for Clinicians

This study encourages clinicians to take a closer look at the impact social media has on emerging adulthood today. Learning more about how the use of Facebook could have a relationship on the development of identity and self-esteem at a pivotal point in emerging adulthood can help clinicians better empathize with the struggles of creating a solid sense of self. It could also aid in helping clinicians counsel families on the risks and benefits associated with using social networking sites, particularly Facebook. Clinicians can help encourage clients to engage in open communication with their family if they find themselves being positively or negatively influenced by their Facebook interactions. Parents and clinicians can also collaborative to work on ways of improving emerging adults' self-esteem and solidifying their sense of identity, thereby potentially decreasing possible negative associations with Facebook usage.

Limitations

Several limitations exist in this study, hindering the ability to generalize the results. The majority of participants were straight, White, single females. Future research would be useful to

determine if there are any differences in the way Facebook influences self-esteem and social identity development based on differing races, genders, sexual orientation, and marital status. One's sexual orientation would be of particular interest, as orientations such as bisexual and transsexual have become a hot topic of conversation within societal norms.

Participants were sampled from a rural university. It would be interesting to note any differences if the study were to be recreated at universities in suburban and urban campuses. Additionally, due to convenience sampling, the majority of the participants came from Northern Illinois University's Family, Consumer, and Nutrition Science major. Conducting this study using participants with varying majors would be useful in determining whether there are cultural differences in how self-esteem and social identity is developed and influenced by Facebook among different majors. Last, increasing the sample size would aid in supporting the significance of the results found in this study.

Despite these limitations, this study contributes to the literature's support of Facebook interactions and its potential relationship on varying aspects of one's self-esteem and identity. While the results may not be generalizable, it does contribute much-needed further research on the influence Facebook can have, specifically on emerging adulthood.

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APPENDIX A
INSTITUTIONAL REVIEW BOARD APPROVAL



NORTHERN ILLINOIS UNIVERSITY

Office of Research Compliance and Integrity

Lowden Hall 301 · DeKalb, IL 60115-2584

815-753-8588 · Fax 815-753-1631 · www.niu.edu/orci

Exempt Determination

11-Feb-2015

Mary Schufreider

Family, Consumer and Nutrition Sciences

RE: Protocol # **HS15-0055** "**Facebook usage and its relationship on emerging adulthood's self esteem and identity development**"

Dear Mary Schufreider,

Your application for institutional review of research involving human subjects was reviewed by Institutional Review Board #1 on **11-Feb-2015** and it was determined that it meets the criteria for exemption, as defined by the U. S. Department of Health and Human Services Regulations for the Protection of Human Subjects, 45 CFR 46.101(b), 2

Although this research is exempt, you have responsibilities for the ethical conduct of the research and must comply with the following:

Amendments: You are responsible for reporting any amendments or changes to your research protocol that may affect the determination of exemption and/or the specific category. This may result in your research no longer being eligible for the exemption that has been granted.

Record Keeping: You are responsible for maintaining a copy of all research related records in a secure location, in the event future verification is necessary. At a minimum these documents include: the research protocol, all questionnaires, survey instruments, interview questions and/or data collection instruments associated with this research protocol, recruiting or advertising materials, any consent forms or information sheets given to participants, all correspondence to or from the IRB, and any other pertinent documents.

Please include the **protocol number (HS15-0055)** on any documents or correspondence sent to the IRB about this study.

If you have questions or need additional information, please contact the Office of Research Compliance and Integrity at 815-753-8588.

APPENDIX B

THE FACEBOOK INTENSITY SCALE

Subscale 1: Amount of Time Spent on Facebook

In the past week, on average, approximately how much time per day have you spent on Facebook?

- Less than 10 minutes
- 10-30 minutes
- 31-60 minutes
- 1-2 hours
- 2-3 hours
- More than 3 hours

Subscale 2: Facebook Belongingness

Facebook is part of my everyday activity.

- 1- Strongly disagree
- 2- Disagree
- 3- Neutral
- 4- Agree
- 5- Strongly agree

I am proud to tell people I am on Facebook.

- 1- Strongly disagree
- 2- Disagree
- 3- Agree
- 4- Strongly agree

Facebook has become part of my daily routine.

- 1- Strongly disagree
- 2- Disagree
- 3- Agree
- 4- Strongly agree

I feel out of touch when I haven't logged onto Facebook for a while.

- 1- Strongly disagree
- 2- Disagree
- 3- Agree
- 4- Strongly agree

I feel I am part of the Facebook community

- 1- Strongly disagree
- 2- Disagree
- 3- Agree
- 4- Strongly agree

I would be sorry if Facebook shutdown

- 1- Strongly disagree

- 2- Disagree
- 3- Agree
- 4- Strongly agree

APPENDIX C

ROSENBERG SELF-ESTEEM SCALE

Rosenberg Self-Esteem

1. On the whole, I am satisfied with myself.
- *2. At times I think I am no good at all.
3. I feel that I have a number of good qualities.
4. I am able to do things as well as most other people.
- *5. I feel I do not have much to be proud of.
- *6. I certainly feel useless at times.
7. I feel that I'm a person of worth, at least on an equal plane with others.
- *8. I wish I could have more respect for myself.
- *9. All in all, I am inclined to feel that I am a failure.
10. I take a positive attitude toward myself.

Scoring:

Strongly Disagree Strongly Disagree Strongly Disagree Strongly Disagree

Items 2, 5, 6, 8, 9 are reverse scored. Give "Strongly Disagree" 1 point, "Disagree" 2 points, "Agree" 3 points, and "Strongly Agree" 4 points. Sum scores for all ten items. Keep scores on a continuous scale. Higher scores indicate higher self-esteem.

APPENDIX D

FACEBOOK IDENTITY SCALE

Facebook Identity Scale

*Scored 1-4 (1-strongly disagree/4- strongly agree)

1. I often think about the fact that I am a member of Facebook.
2. In general, being a member of Facebook is an important part of my self-image.
3. Being a member of Facebook is an important reflection of who I am.
4. In my everyday life, I often think about what it means to be a member of a Facebook.
5. In general, I'm glad to be a member of a Facebook.
6. Generally, I feel good when I think about myself as a member of Facebook.

APPENDIX E
SOCIAL COMPARISON SCALE

Social Comparison Scale**In relationship to others I feel:**

Inferior	1	2	3	4	5	6	7	8	9	10	Superior
Incompetent	1	2	3	4	5	6	7	8	9	10	More competent
Unlikeable	1	2	3	4	5	6	7	8	9	10	More likeable
Left out	1	2	3	4	5	6	7	8	9	10	Accepted
Different	1	2	3	4	5	6	7	8	9	10	Same
Untalented	1	2	3	4	5	6	7	8	9	10	More talented
Weaker	1	2	3	4	5	6	7	8	9	10	Stronger
Unconfident	1	2	3	4	5	6	7	8	9	10	More confident
Undesirable	1	2	3	4	5	6	7	8	9	10	More desirable
Unattractive	1	2	3	4	5	6	7	8	9	10	More attractive
An outsider	1	2	3	4	5	6	7	8	9	10	An insider