THE INFLUENCE OF PERSONALITY TRAITS AND SELF-CONSTRUALS ON FACEBOOK USE

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ABSTRACT

This thesis examined personality traits (conscientiousness, openness to experience, extraversion, agreeableness, and neuroticism), narcissism, self-construals (independent and interdependent), and motivation (fun, time, communication, job, relationships, popular, and information) on Facebook use. Personality traits on frequency of Facebook use, amount of Facebook friends and profile length, and factors that may influence motivation to use Facebook were also examined. A survey was conducted with students from a large US western university. Results from the study showed that narcissism was significantly related to the amount of Facebook friends. Agreeableness and independent self-construal, however, were not significantly related. In this study, extraversion was associated with communication as a social-motivation to use Facebook. Conscientiousness and neuroticism, though, did not have any significant relationship with frequency of Facebook use. This finding supports the need to examine the influence of “personality traits,” “motivation,” and “self-construals” when interpreting social media use behavior. Suggestions for future research are addressed.
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CHAPTER 1

INTRODUCTION

Social networking sites (SNS) became an instant hit when they were first launched in the 1990s. Sites such as Myspace, Facebook, Cyworld, and Friendster allow individuals to speak their minds through blogs, text, instant messaging, and video. These sites allow users to form online communities, keep in touch with friends, and maintain their offline relationships. One popular SNS is Facebook, which is now the world’s largest social networking site. Facebook was first launched in February 2004 by Mark Zuckerberg, Dustin Moskovitz, and Chris Hughes as a site for Harvard College students. Soon after, college students from all over the nation with college.edu e-mail account were able to sign up. In the fall of 2005, Facebook opened its doors for high school networks, followed by work networks, and finally all internet users. In 2008, Facebook.com was ranked the 16th most visited website in the U.S. and the 13th most visited website in the world (comScore, 2008). In 2010, Facebook surpassed Google as the most visited website in the US (Experian Hitwise, 2010).

Today, Facebook continues to grow. More and more visitors are signing up for Facebook by the minute. Currently, Facebook has over 500 million active users with 50% of their users logging in everyday (Hodgkins, 2010). Despite the explosive growth of the number of users on Facebook, research investigating the effects of self-traits such as personality, narcissism, motivation, and self-construals on Facebook behavior is rare. Particularly, research is needed to explore how personality traits are expressed online. In the past, some researchers found that social networking sites are popular among narcissists, but there’s no evidence that Facebook users are more narcissistic than others.
(Buffardi & Campbell, 2008). Users who have Facebook can share their personal information including gender, birthday, pictures, political views, e-mail, relationship status, interests, favorite music, favorite movies, and educational background. Facebook gives its users the option to choose whether or not the user wants to make their profile public or private. If a user decides to make their profile private, it is only available for their Facebook friends to see. To view their profile, a person has to add the user as a friend.

There are two types of messaging services that Facebook offers: (1) a private system which is much like sending an email and (2) a public system which is also known as “The Wall,” where friends leave comments on the owner’s profile that is viewable to the owner’s friends. “News Feed” and “Mini-Feed” are two features Facebook offers for owners to keep in touch with their friends. “News-Feed” updates a personalized list of new stories throughout the day, generated by the activity of friends that tells you everything that your friends on your list have done recently on Facebook. (e.g., Tiffany added “Seinfeld” to her favorites, Robert changed his status to “married,” Nick is on a trip, etc.) It also tells you who has added you as a friend, who posted on your wall, who added new pictures, etc. Every time users log in, they get the latest news on their “News Feed.” “Mini-Feed” is very similar, except that it centers around one person. Each user’s “Mini-Feed” shows what has changed recently in their profile and what applications they have added.

Social networking sites such as Facebook have become the key online source in learning more about products, organizations, artists, and events that are going on around the world. However, the influence of personality traits, motivation, and self-construals
have not been thoroughly examined. This study deals with the effect of personality traits, motivation, and self-construals on Facebook usage. The following literature review section will discuss the meaning of personality traits, motivation, and self-construals and their possible influence on Facebook use. This section will present several hypotheses and research questions regarding personality, motivation, self-construals and Facebook use. The next portion of the thesis will include the survey methodology, sampling procedure, and the process of developing the instruments and administering them. The results section will report the data analysis. Finally, the theoretical contribution of this article will be discussed along with directions for future research.
CHAPTER 2
THEORETICAL REVIEW

In this section, I examined past studies on personality, motivation, and self-construals and their impact on media use.

*Personality*

Social networking sites have changed the way in which people communicate today. They allow individuals to find others with similar interests, social activities, and romantic purposes, while helping those with pre-existing connections keep in touch. Interactions through SNS may actually result in more positive relationship than face-to-face interactions (Ellison, Steinfield, & Lampe, 2007). Researchers have found that personality characteristics such as extraversion and introversion play a significant role in online communication experiences (Butt & Phillips, 2008).

The Five-Factor Model (FFM) is used to categorize personality influences. The FFM divides personality into a series of five dimensional traits (McCrae, 1992). Neuroticism reflects an individual’s tendency to experience psychological distress and high levels of the trait are associated with a sensitivity to threat. Individuals who score high on neuroticism are more likely than the average person to experience feelings such as anger, guilt, depression, and anxiety (Swickert, Hittner, Harris, and Herring, 2002).

Extraversion reflects an individual’s tendency to be sociable and able to experience positive emotions. Extraverts are talkative, assertive, loud, and outgoing (McCrae, 1992). Extraverts are fun loving so they tend to approach others easily and love to engage in social interaction. Amiel and Sargent (2004) found that extraverts do not use the internet as a substitute for real-world interactions, and are more likely to use
forms of computer-mediated-communication to voice their own opinions, conduct research, and share music with others. On the other hand, people who are low in extraversion are characterized as people that are serious, alone, quiet, and stay within their boundaries or within their group of friends.

Openness to experience represents an individual’s willingness to consider alternative approaches, be intellectually curious, and enjoy artistic pursuits. The openness dimension measures imagination, curiosity, originality, and open-mindedness. Low openness scores indicate practical, down to earth, or traditional. Perhaps people who score high on openness are more likely to keep up with new social networking technologies. McCrae (1996) suggests that among the five factors openness to experience may have the strongest influence on social and interpersonal phenomena.

Openness to experience is a trait related to trying out new methods of communication or using Facebook to seek out new experiences (Butt & Phillips, 2008). It is the personality factor most likely to be associated with trying out new methods of communication or using Facebook to seek out new and novel experiences (Butt & Phillips, 2008). However, the exact role of openness to experience and Facebook use is not clear. Facebook has become a relatively mainstream communication tool for individuals and may not be a “unique” experience (Ellison et al., 2007).

Agreeableness is the tendency to display interpersonal behavior that is trusting, sympathetic, and cooperative. Agreeableness is related to people who are kind, flexible, trusting, and forgiving, with a tendency to be pleasant and accommodating in social situations. McCrae (1996) reported that agreeableness and conscientiousness were most
highly positively correlated with personal network structure. Extraversion, however, had very little influence.

Conscientiousness reflects the degree to which a person is organized, careful, responsible, diligent, and scrupulous. Findings show that people who are high in conscientiousness have more frequent contact with their family members and friends (Butt & Phillips, 2008; Swickert et al., 2002). Conscientious individuals try to stick to their own goals by limiting distractions such as going on SNS. Individuals that are high in conscientiousness are likely to avoid Facebook, which can be a great distraction for their daily tasks. Highly conscientious people refrained from using social networking sites because they thought SNS were a distraction to their student life (Butt & Phillips, 2008; Swickert et al., 2002). Overall, research on conscientiousness and its relation to Facebook use is still in the early phases.

Therefore, I hypothesized that:

H1: The higher the level of conscientiousness, frequency of using Facebook will be lower.

Previous research found that the five aforementioned personality traits were associated with certain online activities. Butt and Philips (2008) found that individuals who scored high on neuroticism were likely to use the internet to avoid loneliness. Swickert, Hittner, Harris, and Herring (2002) found that individuals who scored high on neuroticism reported the lowest levels of perceived social support. Researchers observed that individuals who scored high on neuroticism were more likely to post accurate personal information on their profiles (Amichai-Hamburger, Wainpel & Fox, 2002). This
way of posting information is likely intended to strengthen psychological support (Mantovani, 2001), which psychologically vulnerable individuals lack. Wolfradt and Doll (2001) found that when combined with high levels of social interests, individuals who scored high on neuroticism demonstrated a strong interest in using the internet for their communication needs.

Studies reported that people with high levels of neuroticism tend to spend more time on social networks because of their fear of rejection so they tried harder to present themselves positively in an unstained, attractive matter (Amichai-Hamburger, Wainpel & Fox 2002).

Therefore, I hypothesized that;

H2: The higher the level of neuroticism, individuals will spend more time on Facebook.

Individuals who are low on agreeableness are associated with someone who is unpleasant to be around (Butt & Phillips, 2008). A person low in agreeableness will have a difficult time forming offline and online relationships and therefore, is likely to have fewer friends that can be added to Facebook (Butt & Phillips, 2008).

Therefore, I hypothesized that;

H3: The lower the level of agreeableness, individuals will have less Facebook friends.

Introversion is another trait associated with online use. Introverts have a tendency to view their real self as being located online, while extraverts are likely to locate their
true identity offline (Ross, Orr, Sisic, Arseneault, Simmering, & Orr, 2008). With Facebook, introverts can remove their physical “gating features” (stuttering, shyness, etc.) which enables shy people to bypass the usual obstacles that prevent them from constructing desired identities in face-to-face settings (McKenna et al., 2002). Introverts are likely to locate their true self online and are more likely to utilize social networking sites such as Facebook for their communication needs. It is likely that they will have to rely mainly on SNS to form interpersonal relationships because it is harder for them to create offline relationships than less introverted people.

Wehrli (2008) conducted a study that included a total of 1560 students from a Swiss technical university. They completed an online survey which corresponded to their online profiles and friendship networks on a popular SNS. The survey consisted of questions about the intensity of their SNS usage and preferences. The correlations between self-reported and observed indicators were very high. This suggests that most students filled out their online profiles truthfully. Results indicated that extraversion played an important role in the forming of network ties. Extraverts showed a higher probability in joining StudiVZ, which is similar to Facebook.com.

As past studies on introverts and extravert personalities are more relevant to the motivation of Facebook (SNS) use than usage itself, a hypothesis will be presented in the motivation section.

**Narcissism**

Facebook and other social networking sites represent an entirely different means for people to present themselves (Buffardi & Campbell, 2008). Individuals who are narcissistic want the world to think as highly of them as they think of themselves and
social networking sites such as Facebook give them a high degree of control over what information they want to present to the world (Rosen, 2007). This includes photos, status updates, posts, and measures of popularity by the number of friends they have.

A narcissistic individual refers to a person reflecting an inflated self-concept (Brown & Zeigler-Hill, 2004). These traits are associated with positive and inflated self-views of one’s attractiveness, power, and intelligence (Brown & Zeigler-Hill, 2004; Campbell, Rudich, & Sedikides, 2002). In this study, individuals who display narcissistic traits are predicted to have higher levels of social activity in the online community, more social interaction, and have more self-promoting content by providing more information about themselves, hobbies, pictures, their favorite movies, etc.

When it comes to forming interpersonal relationships, narcissism is associated with being liked in initial interactions, being perceived as a leader, exciting, socially confident, entertaining, and have the ability to obtain sexual partners (Foster, Shirara & Campbell, 2006). Research has shown, however, that the initial likeability associated with narcissism fades and is reversed over time (Foster, Campbell, & Twenge, 2003). Seeking out, closeness, empathy, or emotional warmth was reported to be lacking in narcissistic people (Brunell et al., 2004). Individuals with narcissistic traits are known to use relationships as an opportunity for their self-enhancement. They are likely to show off when they are surrounded by a lot of people and seek powerful, rich, and attractive romantic partners (Campbell, 1999).

Studies have shown that narcissistic individuals are eager and excited to talk about themselves (Buss & Chiodo, 1991) because talking about themselves allows them to increase their self-esteem through public glory (Wallace & Baumeister, 2002).
Narcissistic individual’s main goal on Facebook is to add as many people as possible, some reaching thousands, to show off that they are well known and that they are popular.

Therefore, I hypothesized that:

H4-1: The higher the level of narcissism, individuals will have more Facebook friends.

H4-2: The higher the level of narcissism, individuals will have a lengthier profile.

**Diverse Motivations to use Facebook**

One of the biggest reasons people sign up for social networking sites is to keep in touch with their friends or acquaintances. Facebook allows users to keep in touch with their pre-existing connections without being obligated to call them on the phone or meeting them face to face. McKenna, Katelyn, Green, Glenson, and Marci (2002) suggest that interactions through the internet may result in a stronger relationship overall than interacting face to face. This is possible because while interacting online, people are more inclined to self-disclose more information about themselves because they do not have to worry about saving face, whereas in face to face interactions, people are more worried about saving face resulting in less self-disclosure. Since people are more willing to disclose online, they are willing to ask deeper personal questions and are more willing to answer them.

Many relationships that are formed online will eventually lead individuals to meet in person after a period of time. Meeting a person from the internet is marked by a series of stages in which trust and comfort are built (McKenna et al., 2002). Most social networking sites show this sort of behavior, that being a person who meets someone online through mutual friends or similar interests will eventually lead to an offline
meeting. However, Facebook is sometimes contrary to this trend because with Facebook, people typically meet in person then form an online relationship with that person. Personality characteristics such as extraversion play a significant role in online communication experiences (Butt & Phillips, 2008; Kraut et al., 2002). People that are lower in extraversion are more likely to use SNS for their communication needs because they find it harder to communicate in person. Because individuals that are lower in extraversion are more likely to locate their true self online, they are more likely to utilize Facebook for their communication needs (Amichai-Hamburger et al., 2002).

Therefore, I hypothesized that;

H5: The lower of level of extraversion, individuals will use Facebook more for social motivation.

**Self-Construals**

Self-construal is a strong intervening variable that can help explain how culture affects communication behavior. Markus and Kitayama (1991) suggested two general cultural self-construals, interdependent and independent. These self-construals help us to better understand the process by which culture influences our communication behavior. These two self-construals were originally conceptualized to reflect the emphasis on connectedness and relations frequently found in non-Western cultures (interdependent self) and the separateness and uniqueness of the individual (independent self).

The main difference between the two is the belief that an individual holds regarding how they are related to others. Those who have high independent self-
construals see themselves as separated from others, whereas those with highly developed interdependent self-construals see themselves as connected with others.

An individual that is high in interdependent self-construal puts strong emphasis on fitting into a group because their desire is to maintain harmony and positive relationships. Due to this belief, a person’s behavior is to put another person’s needs before their own. A person that puts themselves before others, unwilling to accommodate others, and is headstrong is looked down upon in collectivistic (interdependent) cultures. This is different for individualistic (independent) cultures. Markus and Kitayama (1991) have found that individuals that are high in independent self-construal show greater tendency of autonomy, self-realization, and are self-oriented. Individuals high on independent self-construal also show emotions, cognition, and motivation directly, without feeling the need to be accepted. They will think about their own goals before the group goals. This view of self derives from a belief in the wholeness and uniqueness of each person’s configuration of internal attributes (Johnson, 1985). The goal of an independent self is to be assertive, individualist, headstrong and accommodating to the self. Standing out and expressing their own unique internal characteristics is seen as positive.

Studies have shown that independent individuals communicate openly and directly when communicating online, therefore self-disclosure is high (Tidwell & Walther, 2002). People with high interdependent self-construal, though, will be more reserved and indirect. People from individualistic cultures are more likely to engage in more attention-seeking behaviors on Facebook, opposed to those who identify in collectivistic cultures (Joinson, 2008). People from individualistic cultures post more
pictures, comment on people’s pages more, disclose more information about themselves in their profile, change their default picture often, and are more open to discuss their political views (Joinson, 2008).

The main purpose of Facebook is to allow its users to create and maintain social ties (Ellison et al., 2007). It is a social network designed not only to entertain, but to facilitate the maintenance and strengthening of offline relationships. Ellison and colleagues (2007) reported that 94% of college students were Facebook users, spending approximately 10-30 minutes daily on Facebook while communicating with their Facebook friends of about 150-200 people. The majority of these “Facebook friends” were individuals that users met offline.

Highly independent people are more likely to “social browse” than highly interdependent people. Social browsing is meeting someone via SNS with/without the intention meeting them in person in the future (Ellison, Steinfield, & Lampe, 2007). An individual social browses by finding other users by clicking on the search option and narrowing down the options by choosing a specific age range, demographic location and sex. Users can also social browse by looking through the pages of friends and finding mutual friends. Scholars reported that having numerous friends not actually met in person is more important than maintaining existing relationships for highly independent people (Hecht, Warren, Jung & Krieger, 2004).

Hofstede (1980) defined four basic dimensions of characterizing cultures: power distance, uncertainty avoidance, masculinity, individualism, and collectivism. He defined individualism as the tendency to place one’s own needs above the needs of others in the
group, and collectivism as the tendency to place the group’s needs above one’s own. Western societies such as the United States are considered individualistic. Asian, African, and South American societies are considered collectivistic. Participants who identified with more individualistic cultural backgrounds had larger networks of friends on social networking sites (Fogg & Iizawa, 2008).

One way to illustrate this finding is by comparing Facebook with Mixi, which is a Japanese version of Facebook. It motivates its users to connect to more friends by publicizing the number of friendship connections for each user. Facebook and Mixi make it visible to see who has more friends than others. Having a small amount of friends is considered as a marker of low status therefore, users want to add more friends to be seen as socially desirable. Facebook was dominantly used by Westerners. In a study done by Fogg and Iizawa (2008), Mixi users in Japan had an average amount of 58 friends, whereas Facebook users in the United States had an average of 281 friends. When asked if they were “Hoping to add more friends online?” 23 % of Facebook users replied “yes”, whereas 9 % of Mixi users hoped to add new friends. When asked “what amount is the ideal amount of friends?” Facebook users reported an average of 317 friends, whereas Mixi users reported 49 friends. Fogg and Iizawa’s research revealed that people who identify with a more individualistic culture maintain a larger pool of mediated ties than less individualistic people.

Therefore, I hypothesized that;

H6: The higher the level of independent self-construal, individuals will have more Facebook friends.
Research Questions

One of the primary functions of Facebook is social searching (Lampe, et al, 2006). Social searching is an uncertainty reduction strategy where an individual attempts to find out more about people who they met offline. These could be people they had classes with, or met through friends. Thus, Facebook is a communication medium for individuals to learn more about people who they met offline. This thesis will examine if the most frequent motivation for Facebook use is communication.

Therefore, my research question is;

RQ1: Is communication the most frequent motivation for using Facebook?

According to www.insidefacebook.com women outnumbered men in the number of Facebook users and outnumbered them in every age bracket. Furthermore, women outnumbered men in 16 out of 19 social networking sites (royal.pingdom.com). This could be attributed to the strong engagement that women across the globe share with social networking sites. The different ways in which women and men tend to communicate may justify their finding. Gender, ethnic, and national differences potentially influence Facebook use. The US leads in the number of Facebook users compared to the rest of the world. In the US, over 25% of the US population logs onto Facebook every month. There are over 200 countries with active Facebook members, but few studies have looked at the influence of ethnic background on Facebook use.

Therefore, my research question is;
RQ2: How do gender and ethnic background influence Facebook use?
CHAPTER 3

METHODOLOGY

The purpose of this study was to examine influences of personality traits and self-construals on Facebook use. The ensuing section discusses the research study population and measures.

Study Population

A total of 297 students from the University of Hawaii participated in this study. Ethnic composition was Caucasian, Korean, Japanese, Filipino, Vietnamese, Okinawan, and Chinese. Other minorities including Native Hawaiian, Black, Mixed, Hispanic, and Samoan participated in this survey. The State of Hawaii is in many ways a much more culturally, ethnically, and racially blended society than the rest of the United States. The study population was taken in the State of Hawaii because of Facebook’s diversity of users.

Sampling Procedure

Convenience sampling was used to collect data from participants in this research. Students enrolled in speech classes and other undergraduate students at the University of Hawaii were given credit to complete an online questionnaire. The survey was given in fall of 2010. Participants were informed that their participation in this study was completely voluntary and anonymous.

Staff and faculty members were emailed and told that the study was active on surveymonkey.com. Faculty members were briefly explained about the research study and were asked to invite their students to participate in this study. Faculty members and TAs informed their students that the study was online and they would be granted credit if
he/she participated in the survey. Faculty members and TAs informed their students that their participation in the study was completely voluntary and anonymous. Students who voluntarily agreed to participate were given the survey link on surveymonkey.com.

**Measures**

**Personality Scale**

In this study, personality measures were measured from John & Benet-Martinez (1998) Big Five Inventory (BFI) scale. The Big Five are five broad factors (dimensions) of personality traits: extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience. This test included 44-items measured on a 5-point Likert scale (1=strongly disagree, 5=strongly agree). Items included “I see myself as someone who does a thorough job (conscientiousness),” “I see myself as someone who is reserved (neuroticism),” I see myself as someone who generates a lot of enthusiasm (extraversion),” “I see myself as someone who is curious about many different things (openness to experience),” and “I see myself as someone that has a forgiving nature (agreeableness).”

Raskin and Terry’s (1988) Narcissistic Personality Inventory-40 (NPI-40) scale was used to measure narcissism. The NPI-40 was tested in three different studies by its authors in 1988 to analyze construct validity, and has been used in many studies to date. Raskin, Novacek, and Hogan (1991) found that narcissism is positively related to self-esteem and grandiose self-enhancement rather than social desirability. The NPI test include 40-items measured on a 5-point Likert scale (1=strongly disagree, 5=strongly agree). Items included “Modesty doesn’t become me,” “I like to be the center of
attention,” “I see myself as a good leader,” “I like to display my body,” “I like to be complimented,” and “I am an extraordinary person.”

Motivation Scale

Motivation was assessed using Jung et al.’s (2007) scale which was used to measure individual SNS motivation to use Cyworld, South Korea’s most popular SNS. 16 items were classified into two groups: social motivation and non-social motivation including pastime, enjoyment, and job search (professional motivation). Social motivation items included “To keep in touch with friends and family,” “To communicate with distanced friends,” and “To tell others a little bit about me.” Non-social items included “To help me get a job,” “Because everyone is doing it,” and “Because it gives me something to occupy my time.”

The survey also asked participants to indicate sex, age and ethnicity. In addition, participants indicated SNS usage by reporting average Facebook visits per week, how many hours spent on each visit, how long have they had a Facebook account (months), and the number of friends in the respondent’s profile.

Self-Construal Scale

Independent and interdependent self-construals were measured using Leung and Kim’s (1997) Self-Construal Scale. This measure is based on Markus and Kitayama (1991)’s conceptualization of self-construals. Responses to the 29 items were measured on a 7-point scale (1=strongly disagree, 7=strongly agree). Items include “My personal identity, independent of others, is very important to me (independent),” “My happiness depends on the happiness of those in my group (interdependent),” “I am careful to
maintain harmony in my group (interdependent),” and “I enjoy being unique and
different from others (independent).”

Methodology of Analysis

To evaluate the influence of self-construals, personality, narcissism, and
motivations on the use of Facebook, several statistical methodologies including t-tests,
correlation coefficients, chi-square and multiple regression were used.
Figure 1

A Theoretical Model: Hypotheses of Self Traits and Facebook Behaviors

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<td></td>
</tr>
<tr>
<td><strong>H1</strong></td>
<td>↑ Conscientious → Facebook use ↓</td>
</tr>
<tr>
<td><strong>H2</strong></td>
<td>↑ Neuroticism → time of Facebook use ↑</td>
</tr>
<tr>
<td><strong>H3</strong></td>
<td>↓ Agreeableness → Facebook friends ↓</td>
</tr>
<tr>
<td><strong>H4-1</strong></td>
<td>↑ Narcissism → Facebook friends ↑</td>
</tr>
<tr>
<td><strong>H4-2</strong></td>
<td>↑ Narcissism → profile length ↑</td>
</tr>
<tr>
<td><strong>H5</strong></td>
<td>↓ Extraversion → social motivation ↑</td>
</tr>
<tr>
<td><strong>H6</strong></td>
<td>↑ Independent → number of friends ↑</td>
</tr>
<tr>
<td><strong>RQ1</strong></td>
<td>Is communication the most frequent motivation for using Facebook?</td>
</tr>
<tr>
<td><strong>RQ2</strong></td>
<td>How do gender and ethnic background influence Facebook use?</td>
</tr>
</tbody>
</table>
**T-test:** T-tests of the mean are used to find out the mean difference between an obtained mean and its expected value. In this study, a t-test was used to determine the difference between male and female groups.

**Multiple regression:** a statistical technique that predicts values of one variable on the basis of two or more other variables. In this study, multiple regression was used to evaluate the effect of independent self-construal, interdependent self-construal, the Big Five personality factors (neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness), cultural background, and narcissism on Facebook use and the number of Facebook friends (Anderson, 1987, p.206). Hypotheses H1 to H6 are tested with multiple regression.

**Correlation coefficients:** An index that measures the strength and direction of a linear relationship between two variables (Anderson, 1987, p.198).

In this study, correlation coefficients were calculated for all the variables measured.

**Chi-square:** To test nominal data Chi-square is used to find out the difference between a set of obtained frequencies and their expected values. These obtained values can be drawn from a single sample or several samples (Anderson, 1987, p.224).

In this study, chi-square was used to evaluate the effect of ethnic background on Facebook use.

In RQ1, frequency data is applied as communication is the most frequent motivation purpose for using Facebook.

In RQ2, t-tests and chi-square is applied to evaluate the effect of ethnic background and Facebook use.
Multiple regression tests the effect of independent self-construal, interdependent self-construal, the Big Five personality factors (neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness), cultural background, and narcissism on Facebook use and the number of Facebook friends. Correlation coefficients were calculated for all the variables measured.
CHAPTER 4
RESULTS

Characteristics of Participants

Among 297 responses, a total of 236 students from the University of Hawaii at Manoa provided valid responses. The 61 responses that weren’t valid were due to missing data. Of those 236 participants, 105 (44%) participants were male and 129 (55%) participants were female. Two participants did not report their gender. Two hundred three participants (86%) were between the ages of 18 and 25, twenty participants (8%) were between the ages of 26-33, eight participants (3%) were 34 and older, and five participants did not report their age. Among the 236 participants, 58 participants (24%) were Japanese, 38 participants (16%) were Caucasian, 26 participants (11%) were Filipino, 24 participants (10%) were Chinese, 23 participants (9%) were Korean, 11 participants (5%) were Hawaiian, 4 participants (1%) were Samoan, 3 participants were African (1%), 2 participants (1%) were Hispanic, 38 participants (16%) were mixed and 8 participants (3%) were other ethnicities.

Below are the means and standard deviations showing gender, age, conscientiousness, openness to experience, agreeableness, extraversion, neuroticism, narcissism, independent self-construal, interdependent self-construal, how many times a user visits Facebook per week, Facebook friends and profile length.
Table 2

Demographics

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<tr>
<th>Demographics</th>
<th>Age</th>
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<th>Openness</th>
<th>Agreeableness</th>
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<tr>
<td>Mean</td>
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<td>28.26</td>
<td>36.18</td>
<td>30.64</td>
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<tr>
<td>Standard Deviation</td>
<td>4.537</td>
<td>3.315</td>
<td>5.017</td>
<td>3.236</td>
</tr>
<tr>
<td>Total</td>
<td>231</td>
<td>234</td>
<td>228</td>
<td>228</td>
</tr>
<tr>
<td>Legend</td>
<td>years old</td>
<td>5 pts scale</td>
<td>5 pts scale</td>
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</table>

Big Five

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<th>Narcissism</th>
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<tr>
<td>25.56</td>
<td>32.67</td>
<td>171.68</td>
<td>76.4</td>
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<tr>
<td>3.035</td>
<td>3.496</td>
<td>32.502</td>
<td>11.969</td>
</tr>
<tr>
<td>230</td>
<td>232</td>
<td>206</td>
<td>225</td>
</tr>
<tr>
<td>5 pts scale</td>
<td>5 pts scale</td>
<td>7 Pts scale</td>
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Facebook Use

<table>
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<th>Visit Week</th>
<th>FB friends</th>
<th>Profile Length</th>
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<tr>
<td>50.34</td>
<td>30.59</td>
<td>492.72</td>
<td>4.2</td>
</tr>
<tr>
<td>9.402</td>
<td>72.439</td>
<td>407.866</td>
<td>3.177</td>
</tr>
<tr>
<td>232</td>
<td>236</td>
<td>236</td>
<td>235</td>
</tr>
<tr>
<td>7 Pts scale</td>
<td>Times per week</td>
<td>Number</td>
<td>Words</td>
</tr>
</tbody>
</table>

Descriptive Statistics

Descriptive statistics included variables such as gender, age, ethnic background, the big 5 inventory (conscientiousness, openness to experience, neuroticism, extraversion and agreeableness), narcissism, interdependent self-construal, independent self-construal, motivations (fun, popular, job, communication, relationship, time, and information), how many times a user visits Facebook per week, how many Facebook friends a user has, how many words are in the user’s profile, how long they have had Facebook and how many minutes they log onto Facebook per visit.
From the Big Five inventory, openness to experience scored the highest ($M = 36.18, SD = 5.017$). Independent and interdependent self-construals were compared in this study. From the two self-construals there were more independent self-construals ($M = 76.40, SD = 11.969$) than interdependent self-construals ($M = 50.34, SD = 9.402$). Respondents spent an average of ($M = 62.16, SD = 298.382$) minutes on Facebook and visited Facebook an average of ($M = 30.59, SD = 72.439$) times per week. Facebook users from this study stated that they had an average of ($M = 492.72, SD = 407.866$) Facebook friends. When asked how many words are on their “info” tab on Facebook, users stated ($M = 118.09, SD = 359.208$). From the 7 different social and non-social motivations, communication motivation scored the highest with ($M = 13.08, SD = 2.139$)

The means and standard deviations are presented in Table 3.
Table 3

*Descriptive Statistics*

<table>
<thead>
<tr>
<th></th>
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<th>Minimum</th>
<th>Maximum</th>
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<td>1000</td>
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<td>72.439</td>
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<tr>
<td>Facebook friends</td>
<td>236</td>
<td>15</td>
<td>4938</td>
<td>492.72</td>
<td>407.866</td>
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<tr>
<td>How long had FB</td>
<td>236</td>
<td>2</td>
<td>84</td>
<td>36.42</td>
<td>18.269</td>
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<td>Profile length</td>
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<td>0</td>
<td>4241</td>
<td>118.09</td>
<td>359.208</td>
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<tr>
<td>Extraversion</td>
<td>234</td>
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<td>38</td>
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<td>3.315</td>
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<td>Neuroticism</td>
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<td>36</td>
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<tr>
<td>Openness</td>
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<td>48</td>
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<tr>
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<td>98</td>
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<td>2.026</td>
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<td>15</td>
<td>9.56</td>
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<tr>
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<td>15</td>
<td>13.08</td>
<td>2.139</td>
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<td>Popular</td>
<td>236</td>
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<td>10</td>
<td>6.19</td>
<td>2.216</td>
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<tr>
<td>Job</td>
<td>234</td>
<td>2</td>
<td>10</td>
<td>4.10</td>
<td>2.269</td>
</tr>
<tr>
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<td>2</td>
<td>10</td>
<td>4.81</td>
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<tr>
<td>Narcissism</td>
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<td>261</td>
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<td>232</td>
<td>23</td>
<td>45</td>
<td>32.67</td>
<td>3.496</td>
</tr>
</tbody>
</table>
Correlation Coefficients among Independent/Dependent Variables

In this study, correlation coefficients showed many trends. First, extraversion was significantly positively associated with openness to experience $r(236) = .553$, $p < .05$, agreeableness $r(236) = .411$, $p < .05$, and independent self-construal $r(236) = .410$, $p < .05$. Extraversion was moderately associated with neuroticism $r(236) = .194$, $p < .05$, interdependent self-construal $r(236) = .174$, $p < .05$, communication as a motivation $r(236) = .312$, $p < .05$, and conscientiousness $r(236) = .336$, $p < .05$. Number of comments users wrote on friends’ wall had a proportional relationship with extraversion $r(236) = .162$, $p < .01$. Neuroticism was positively associated with agreeableness $r(236) = .341$, $p < .05$, interdependent self-construal $r(236) = .384$, $p < .05$, and conscientiousness $r(236) = .301$, $p < .05$. In addition, openness to experience $r(236) = .165$, $p < .01$ and how long the user has had Facebook $r(236) = .138$, $p < .01$ had a proportional relationship to neuroticism. Openness to experience was significantly positively associated with independent self-construal $r(236) = .580$, $p < .05$. In addition, openness to experience was moderately associated with communication as a motivation $r(236) = .369$, $p < .05$, narcissism $r(236) = .377$, $p < .05$, and conscientiousness $r(236) = .359$, $p < .05$.

Agreeableness was significantly positively associated with conscientiousness $r(236) = .428$, $p < .05$. In addition, agreeableness was moderately associated with openness to experience $r(236) = .381$, $p < .05$ and interdependent self-construal $r(236) = .317$, $p < .05$. Interdependent self-construal had a proportional relationship with openness to experience $r(236) = .195$, $p < .05$ and conscientiousness $r(236) = .258$, $p < .05$. Fun as a motivation was significantly positively associated with communication as a
social motivation $r(236) = .498$, $p < .05$. In addition, fun as a motivation was moderately associated with extraversion $r(236) = .223$, $p < .05$, openness to experience $r(236) = .193$, $p < .05$, independent self-construal $r(236) = .198$, $p < .05$, narcissism $r(236) = .321$, $p < .05$, messages a user sent $r(236) = .134$, $p < .01$, number of comments users wrote $r(236) = .237$, $p < .05$, number of comments a user receives $r(236) = .132$, $p < .01$, how long the user had Facebook $r(236) = .167$, $p < .01$, and how many Facebook friends the user has $r(236) = .209$, $p < .05$. Time as a motivation was significantly positively associated with fun as a motivation $r(236) = .564$, $p < .05$. In addition, time as a motivation was moderately associated with popular as a motivation $r(236) = .334$, $p < .05$, number of comments a user gets $r(236) = .160$, $p < .01$, and how long the user had Facebook $r(236) = .191$, $p < .05$.

Information seeking as a motivation was significantly associated with popular as a motivation $r(236) = .475$, $p < .05$ and relationship as a motivation $r(236) = .405$, $p < .05$. It was moderately associated with fun as a motivation $r(236) = .355$, $p < .05$, narcissism $r(236) = .372$, $p < .05$, photos a week a user posts on Facebook $r(236) = .139$, $p < .01$, messages a user sends $r(236) = .179$, $p < .05$, number of comments a user writes $r(236) = .206$, $p < .05$, and the amount of Facebook friends a user has $r(236) = .157$, $p < .01$. Next, communication as a motivation was moderately associated with time as a motivation $r(236) = .296$, $p < .05$, number of comments a user gets $r(236) = .164$, $p < .01$, the number of comments a user receives $r(236) = .156$, $p < .01$, and the amount of Facebook friends $r(236) = .194$, $p < .05$.

Popular as a motivation was moderately associated with fun as a motivation $r(236) = .314$, $p < .05$, job as a motivation $r(236) = .304$, $p < .05$, and the amount of
Facebook friends $r(236) = .168, \ p < .05$. Further, job search as a motivation was highly associated with relationship as a motivation $r(236) = .439, \ p < .05$. In addition, job as a motivation was moderately associated with information seeking as a motivation $r(236) = .376, \ p < .05$, messages a user sends in a week $r(236) = .176, \ p < .05$, and the amount of Facebook friends a user has $r(236) = .239, \ p < .05$. Moreover, relationship as a motivation was moderately associated with narcissism $r(236) = .257, \ p < .05$ and the number of messages a user sends $r(236) = .139, \ p < .01$.

Narcissism was moderately associated with messages a user sends $r(236) = .208, \ p < .05$, the amount of messages a user receives $r(236) = .217, \ p < .05$, how long the user has had Facebook $r(236) = .186, \ p < .05$, and the amount of Facebook friends a user has $r(236) = .231, \ p < .05$. Next, conscientiousness was moderately associated with interdependent self-construal $r(236) = .258, \ p < .05$ and how long the user had Facebook $r(236) = .165, \ p < .01$. Photos a week a user would post was moderately associated with the number of photos a user’s friend posts of them a week $r(236) = .242, \ p < .05$, the number of messages a user writes $r(236) = .138, \ p < .01$, the number of comments a user writes $r(236) = .287, \ p < .05$, the number of comments a user receives $r(236) = .206, \ p < .05$, and how many times a user visits Facebook a week $r(236) = .326, \ p < .05$.

Photos a user’s friends posts of them a week was moderately associated with the number of comments the user writes a week $r(236) = .167, \ p < .01$ and how many times a user visits Facebook a week $r(236) = .281, \ p < .05$. How many words a user has on their Facebook profile was moderately associated with the number of comments the user would write in a week $r(236) = .143, \ p < .01$. The number of messages sent was highly associated with the number of messages received $r(236) = .609, \ p < .05$, while number of
comments sent $r(236) = .350$, $p < .05$ and number of comments the user received $r(236) = .227$, $p < .05$ were proportional.

The number of comments a user sent was highly proportional to number of comments a user receives $r(236) = .589$, $p < .05$. However, it was moderately proportional to narcissism $r(236) = .171$, $p < .01$, the number of messages the user receives in a week $r(236) = .254$, $p < .05$, the number of times a user visits Facebook per week $r(236) = .361$, $p < .05$, and the amount of minutes the user spends on Facebook per visit $r(236) = .261$, $p < .05$. The number of comments the user receives was moderately associated with the number of messages the user receives $r(236) = .207$, $p < .05$, the amount of Facebook friends $r(236) = .277$, $p < .05$, how many times the user visits Facebook per week $r(236) = .211$, $p < .05$, and how many minutes the user spends on Facebook per visit $r(236) = .215$, $p < .05$. How long the user has had Facebook was moderately associated with the number of messages sent $r(236) = .131$, $p < .01$ and the amount of Facebook friends a user has $r(236) = .153$, $p < .01$. 

32
Table 4

Correlation Coefficients

<table>
<thead>
<tr>
<th>Variable 1</th>
<th>Variable 2</th>
<th>Correlation Coefficients</th>
</tr>
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<tr>
<td>table_all</td>
<td>Pearson Correlation</td>
<td>n = 209, 375.99</td>
</tr>
<tr>
<td></td>
<td>C (D)</td>
<td>95% CI</td>
</tr>
<tr>
<td>speed_all</td>
<td>Pearson Correlation</td>
<td>n = 209, 375.99</td>
</tr>
<tr>
<td></td>
<td>C (D)</td>
<td>95% CI</td>
</tr>
<tr>
<td>length_all</td>
<td>Pearson Correlation</td>
<td>n = 209, 375.99</td>
</tr>
<tr>
<td></td>
<td>C (D)</td>
<td>95% CI</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed)**
*Correlation is significant at the 0.05 level (2-tailed)*

33
**Hypotheses Testing Results**

A total of 236 individuals reported that they used Facebook and 13 reported that they did not use Facebook. The 13 individuals that reported that they do not use Facebook were omitted from this study. Conscientiousness, neuroticism, agreeableness, narcissism, extraversion, independent self-construal and communication were independent variables for regression analysis testing.

**Conscientiousness.** Regression analysis was conducted to evaluate if higher levels of conscientiousness (H1) are associated with lower frequency of Facebook use. This hypothesis was unsupported (B = .004, $\beta = .083$, $t(236) = .917$, $p = .316$).

**Neuroticism.** Regression analysis was conducted to determine if higher levels of neuroticism (H2) is related to spending more time on Facebook. Again, no significant relationship was found (B = .0, $\beta = -.015$, $t = -.160$, $t(236) = .873$).

**Agreeableness.** Regression analysis was conducted to determine if lower levels of agreeableness (H3) is associated with having fewer Facebook friends. The test did not find significance regarding agreeableness and having fewer Facebook friends (B = .009, $\beta = .132$, $t(236) = 1.5$, $p = .136$), either.

**Narcissism.** Regression analysis was conducted to determine if higher levels of narcissism resulted in having a larger amount of Facebook friends (H4-1) and having a lengthier profile (H4-2). Higher levels of narcissism and having more Facebook friends were found to be significant (B = .002, $\beta = .237$, $t(236) = 2.626$, $p = .009$). However, higher levels of narcissism and having a lengthier profile were not significant (B = -2.953E-5, $\beta = -.007$, $t(236) = -.066$, $p = .947$).
**Extraversion.** Regression analysis was conducted to determine if lower levels of extraversion (H5) is related to a user using Facebook for social motivation. The test was significant (B = .204, β = .312, t(236) = 4.935, p = .000).

Furthermore, the relationship between extraversion and non-social motivation for using Facebook because it’s fun (B = .106, β = .223, t(236) = 3.436, p = .001), and to pass time (B = .114, β = .186, t(236) = 2.874, p = .004) was supported.

**Independent self-construal.** Regression analysis show that there is a relationship between individuals with higher independent self-construal (H6) and having a larger amount of Facebook friends. However, the relationship is not significant. (B = -.002, β = -.109, t(236) = -1.085, p = .279).

**Communication.** Frequency data analysis was conducted to evaluate if communication is the most frequent motivation for using Facebook (RQ1). Communication had a mean of 13.08, while means for other motivations were fun with a mean of 8.19, time = 7.77, information = 9.56, popular = 6, job = 4.10, and relationship = 4.81.

**Gender, Ethnic Background, and Dependent Variables.** An independent samples t-test was conducted to assess whether there were any significant differences between male and female participants regarding how many times they visit Facebook per week, amount of Facebook friends they have, and their profile length (RQ2). The test did not find a significant difference: visit Facebook visits per week (p < .299), Facebook friends (p < .497), and profile length (p < .587). Results show that gender does not influence any of the dependent variables.
Table 5

*Gender and Facebook use*

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Gender</th>
<th>Mean Difference</th>
<th>DF</th>
<th>p (2-tailed)</th>
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<td>Visit Week TR</td>
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<td>-0.02014</td>
<td>232</td>
<td>0.299</td>
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<tr>
<td>FB Friends</td>
<td></td>
<td>0.02013</td>
<td>232</td>
<td>0.497</td>
</tr>
<tr>
<td>Many words TR</td>
<td></td>
<td>0.00981</td>
<td>231</td>
<td>0.587</td>
</tr>
</tbody>
</table>

The relationship of the participant’s ethnic background, how many times they visit Facebook per week, amount of Facebook friends they have and their profile length was then analyzed using a Chi-Square test. No significant relationships were found. Ethnic background did not influence the amount of Facebook friends the user had, how many times they visit Facebook per week and their profile length (Table 4).

Table 6

*Ethnic Background and Facebook Use*

<table>
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<tr>
<th>Dependent Variable</th>
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<th>p</th>
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<td>FB Friends TR</td>
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<tr>
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<td></td>
<td>940</td>
<td>0.581</td>
</tr>
</tbody>
</table>
Figure 2

A Theoretical Model: Hypotheses Testing Results of Self-Traits and Facebook Behaviors

Self-Traits

H1: Conscientiousness

H2: Neuroticism

H3: Agreeableness

H4-1 & H4-2: Narcissism

H5: Extraversion

H6: Independent Self-Construal

Facebook Use Behaviors

Facebook Use Frequency

Number of Facebook Friends

Profile Length

Social Motivation (Communication)

-- Not significant
-- Significant
CHAPTER 5
DISCUSSION

This thesis examined the relationship between the Big Five Inventory (conscientiousness, openness to experience, extraversion, agreeableness, and neuroticism), narcissism, independent self-construal, interdependent self-construal, motivation (time, fun, popular, job, communication, relationship, and information), how many times a user visits Facebook per week, how many minutes a user spends on Facebook per visit, the amount of Facebook friends the user has, and how many words are in their profile. Many variables in this study were related but none significantly; higher levels of conscientiousness and lower frequency of using Facebook were not related. In addition, neuroticism was also not significantly related to spending more time on Facebook. When it came to the subject of Facebook friends, lower levels of agreeableness was not significantly related to having fewer Facebook friends. Narcissism, however, was significantly related to having more Facebook friends.

Facebook is a new medium of human communication that has changed how individuals interact today. Facebook not only connects people that have lost touch such as old classmates, but people from different backgrounds, co-workers, friends, and family thus making Facebook more enjoyable for its members to connect, reconnect, and communicate. Mass media communication is made possible for everyone around the world. Facebook is a dynamic way for people from across the world to send and receive messages. Something like this was impossible before the 21st century. Facebook allows individuals to communicate with one another on an interpersonal level. Therefore, Facebook is becoming the new platform for human communication.
This study found that those who have lower levels of extraversion use Facebook to communicate (social-motivation). Results showed that from all the 7 different types of motivation, communication was found to be the most frequent motivation for using Facebook. This study focused on an individual’s independent self-construal and the amount of Facebook friends which is important as cultural differences significantly influence the study of computer-mediated-communication. For this study, the amount of Facebook friends and independent self-construal were not significantly related. In addition, gender and ethnic background were not significantly related to the how many times a user visits Facebook per week, the amount of Facebook friends a user has, and their profile length. Results showed that gender and ethnic background did not influence any of these dependent variables. The following section will discuss the results of this study and offer possible explanations.

**Personality Factors and Facebook Use**

The first hypothesis posited that individuals with higher levels of conscientiousness would be associated with lower frequency of Facebook use. No significant relationship was found. Past studies have shown that highly conscientious people refrained from participating on social networking sites because they thought it was a distraction to their student life (Butt & Phillips, 2008; Swickert et al., 2002). In the past, users would need a computer with internet connection to go on Facebook; this took a lot of time and made Facebook not easily accessible. Now, a user can go on Facebook with the Facebook application on their mobile phones and tablets like the ipad without using a computer. With this application users may go on Facebook more frequently because it’s so easily accessible. Statistics on Facebook show that there are more than
200 million active users currently accessing Facebook through their mobile devices. People that use Facebook on their cell phones are twice as more active on Facebook as people who do not have the Facebook application (Munchbach, 2010).

The second hypothesis postulated that individuals with higher levels of neuroticism would spend more time on Facebook. Results did not show any significant findings between neuroticism and spending more time on Facebook. This finding is inconsistent with the findings of Amichai-Hamburger et al. (2002) in that it does not support the idea that individuals that are higher in neuroticism tend to spend more time on social networks such as Facebook arguing that their fear of rejection caused them to try harder to present themselves well in an unstained attractive matter. One plausible explanation as to why there was no significant difference is that since neuroticism is perceived to be a negative personality trait, individuals that are high in neuroticism may not have thought that they possessed any of the characteristics; therefore, they may have not answered truthfully.

The third hypothesis posed that individuals with lower levels of agreeableness would have fewer Facebook friends. However, there was no significant relationship found between lower levels of agreeableness and having fewer Facebook friends.

Previous research indicated that individuals that are low in agreeableness will have a difficult time forming offline and online relationships and therefore, would be likely to have fewer friends that can be added to Facebook (Butt & Phillips, 2008). Because Facebook does not restrict its users from adding anyone as a friend, users can add anyone as a friend even if they have never met the person. Consequently, a person that is low on agreeableness and has a difficult time forming online relationships can still
have a high number of friends because some Facebook users confirm friend requests casually without consideration, and even if they do not know the person requesting. Some users may think a social networking site such as Facebook should be used to meet new people, regardless if they have actually met them in person or not; therefore, they are willing to add as many people as possible. Scholars reported that having a lot of friends not actually met in person is more important than maintaining existing relationships for highly independent people (Hecht, Warren, Jung & Krieger, 2004).

Hypotheses 4-1 and 4-2 posited that individuals with higher levels of narcissism would have more Facebook friends and will have a lengthier profile. The results were consistent with the hypothesis 4-1. Individuals with higher levels of narcissism did have more Facebook friends. This finding is consistent with previous research on narcissism. A narcissistic individual’s main goal is to add as many people as possible with some reaching thousands, to show off that they are well known and that they are popular (Wallace & Baumeister, 2002). A plausible explanation for this finding is that a person that is high on narcissism may believe that having a larger amount of friends measures their popularity; therefore, they are more likely to add more friends than reject friend requests. This study found narcissism to be the most powerful personality trait compared to the five other personality traits. Some reasons why narcissism was found to be the most powerful trait may be because Facebook offers users an easy way to present idealized images of themselves, even if those idealized images don’t represent what these individuals are like in real life. Therefore, these individuals may upload more self-promoting photos of themselves to make them look more attractive. Facebook also allows the user a great deal of control over how he or she is presented to and perceived by
peers and other users. These individuals will only post things that will boost up their self-esteem. Narcissistic people also use Facebook to show off how popular they are by adding a lot of friends. However, a large number of these friendships may be hollow friendships without having to establish a real relationship. Facebook provides an ideal setting for narcissists to monitor their appearance and the amount of friends they have which might have accounted for why narcissism was the most powerful personality factor.

Individuals with higher levels of narcissism, however, did not have any significant relationship with having a lengthier profile. This finding is inconsistent with the findings of Brown and Zeigler-Hill (2004), who found that individuals displaying narcissistic traits have higher levels of social activity in the online community by providing more information about themselves, hobbies, their favorite movies, and others. Possible reasons for this finding could be that some participants in this study did not know how many exact words were on their Facebook “info” tab, so they may have just guessed the amount, and therefore the actual amount that they reported may have been lower than reality. Another possible explanation could be that individuals higher in narcissism may feel that writing more on their friend’s walls, status updates, and selecting more attractive photos of themselves is more important than having a lengthier profile. Bibbly (2008) found that narcissistic individuals updated their Facebook status more frequently than their less narcissistic peers. Given that these status updates are displayed in their friends’ news feeds, individuals higher on narcissism feel the need to present ‘what’s on their minds’ to their Facebook friends more frequently.
**Extraversion and Motivations to Use Facebook**

The fifth hypothesis posited that individuals lower in extraversion will use Facebook for social motivation. The results of this study found that individuals that scored lower on extraversion were significantly related to using Facebook as a social-motivation (communication). Similar to the findings of Amichai-Hamburger et al. (2002) individuals that scored lower on the extraversion scale were more likely to use SNS for their communication needs because they found it harder to communicate in person. Individuals that are lower on extraversion are more likely to locate their true self online and are more likely to utilize Facebook for their communication needs. An individual that is lower on the extraversion scale might be too shy to interact or communicate with others in person and as a result they find it easier and more enjoyable to communicate through Facebook.

**Independent Self-Construal and Facebook Friends**

The sixth hypothesis postulated that individuals with high independent self-construal would have more Facebook friends than individuals with a lower independent self-construal. Results indicated that individuals that were higher in independent self-construal did not have any significant relationship with having more Facebook friends. Independent self-construal did not have any effect in this study and one explanation is that some individuals may have been bi-cultural due to Hawaii’s diverse ethnic make-up. An individual that is bi-cultural is someone who has both high independent and interdependent self-construal. Yamada and Singelis (1991) found that individuals who have been identified as bicultural did have an interdependent self comparable to that of the traditional group as well as an independent self comparable to a Western group.
Interracial marriages are very common in Hawaii with many individuals coming from mixed backgrounds. These individuals may be living with two or more cultures. Many individuals in Hawaii are children of immigrants. Their parents moved here from another country and went through the acculturation process. These individuals may hold the values and customs of their parent’s old culture and their new culture which makes them bi-cultural instead of having an independent or interdependent self-construal. Bhawuk and Brislin (1992) found that individuals with intercultural experience, whether through time abroad in another culture or through daily interaction within a culturally diverse community, demonstrated cultural flexibility. It was found that these individuals adjusted their selection of behavioral intention items dependent on whether the context was the USA or their home culture.

Past research findings show that Easterners (interdependent self-construals) had an average of 58 friends (Fogg & Iizawa, 2008), which is lower than the average amount of Facebook friends. Facebook statistics show that a typical user has an average of 130 Facebook friends. Fogg and Iizawa (2008) also found that Westerners (independent self-construals) had an average of 281 Facebook friends, which is above the average amount of Facebook friends. This study, however, did not find the same clear support.

A possible explanation for the non-significant relationship between independent self-construals and having more Facebook friends could be that having more friends may have not a high priority for some individuals. Some users get Facebook to keep up with “just” good friends. People’s preference for relationship quality may be higher than that of quantity.
Motivation for Facebook

Research question one analyzed if communication will be the most frequent motivation for using Facebook. From the 7 different social and non-social motivations, communication scored the highest. This parallels the results found by Ellison et al., (2007) where the main purpose of Facebook was to allow its users to create and maintain social ties. It is a social network for entertainment, maintaining, and strengthening offline relationships. Ellison and colleagues (2007) reported that 94% of college students were Facebook users, spending approximately 10-30 minutes on Facebook on a daily basis communicating with their Facebook friends of about 150-200 people.

Gender, Ethnic Background, & Facebook Use

Research question two examined the relationship between participants’ sex, ethnic background, and Facebook use. Male and female participants were similar in regards to how many Facebook friends they had, how many words were in their Facebook profile, and how many times they visit Facebook per week. Gender in this study was not found to be a factor as there was no significant difference between males and females. How many times a user visits Facebook per week, the amount of Facebook friends a user has, and how many words on in their profile were very similar between males and females in this study. Although not significant results did show that females had a higher average time per log-in than males, which is the same as Barker (2009).

According to www.bizjournals.com (2010), social networking sites have a higher percentage of women users than men globally, with 75.8% of all women online visiting a social networking site in May 2010 versus 69.7% of men. They also found that women also spend significantly more time on social networking sites than men, with women
averaging five and a half hours per month compared to men’s four hours, demonstrating the strong engagement that women across the globe share with social networking sites. The different ways in which men and women tend to use conversation may justify this research.

Results showed no significant differences between and Ethnicity and Facebook use. Past studies have shown that Westerners (Caucasians) had more Facebook friends than Easterners (Asians) (Fogg & Iizawa, 2008), but there still needs to be more studies conducted in order to better understand ethnic background and Facebook use.

**Limitations and Suggestions for Future Research**

There are several limitations to this study. First, the survey was very long. Subsequently, some participants may have just rushed through the study in order to finish it as quickly as possible. As a consequence, many participants may have not reported fully accurate results, or maybe gave up their accuracy in the middle of the study. Over 60 participants from this study had to be omitted because their responses were not complete. The length of the survey may have lead individuals to quit in the middle of the survey.

There are several suggestions for future research studies. First, a replication of this study should be conducted using larger sample size of college students. Additionally, the participants should come from a variety of universities from different geographic locations, as the diversity will increase generalizability. The sample also consisted of students recruited from a local university who were enrolled in Speech classes in their 20s. While the study collected data from college students, the sample does not represent all college students in the world or even the United States. The use of
a convenient student sample lowers the generalizability of the findings. Larger samples from the target population (Facebook users) would certainly be preferable. Future studies could compare motivations for Facebook use between elementary, intermediate, high school and college students from different schools because different age groups can count to different motivations for using Facebook.

Moreover, findings from this study indicate that there are significant relationships between narcissism and the amount of Facebook friends a user had. Individuals that scored higher on narcissism had more Facebook friends than individuals that scored lower on narcissism. Many of the current studies only look at narcissism, amount of Facebook friends and how much information the user posts on their Facebook profile. Instead, I suggest future studies should expand on researching more on narcissism and how many times a user comments on their friends’ pages, and uploads photos per week.

In this study narcissism was not significantly related to the amount of words users’ had on their information tab. Bibbly (2008) found that narcissistic individuals updated their Facebook status more frequently than their less narcissistic peers. Given that these status updates are displayed in their friends’ news feeds, individuals higher on narcissism feel the need to present ‘what’s on their minds’ to their Facebook friends more frequently. Therefore, a future direction could expand on researching more on narcissism and how many times a user updates their status per week.

**Conclusion**

The current study is an initial step for future studies concerning personality factors, motivations, self-construals, on Facebook use. In this study, individuals that scored lower on extraversion used Facebook for social motivation (communication). A
plausible explanation for this finding is that an individual that is lower on the extraversion scale may be too shy to interact or communicate with others in person; as a result, they may find it easier and more enjoyable to communicate through Facebook. Although not posted as a hypothesis, the relationship between lower levels of extraversion and non-social motivation was supported (fun & time).

This study hypothesized that an individual higher in independent self-construal will have more Facebook friends than an individual that is lower in independent self-construal. However, independent self-construal was found not to be relevant to having more Facebook friends. One explanation could be because of Hawaii’s ethnic diversity so many individuals may have been bicultural. Several studies suggested that individuals view themselves as either independent or interdependent based on cultural influences (Markus & Kitayama, 1991). Other studies have proposed that individuals may view themselves as bi-cultural, being independent and interdependent (Singelis, 1994). There is a clear contradiction between the conceptualization of independent and interdependent self-construals. A consensus among these two concepts would increase clarity and understanding of cultural effects on communication behaviors. There are a few studies on self-construals and motivations to use Facebook. One study found that individuals with high interdependent self-construal are found to have greater social motivations (Kim, Kim, & Nam, 2010). Furthermore, there should be more studies examining self-construals in order to explore these areas more in-depth.

Facebook has become a new medium for humans to communicate with one another. Online interactions do not necessarily remove individuals from their offline world but are used to maintain relationships and keep people in contact. Personality
traits, motivations and self-construals in online contexts such as Facebook are becoming increasingly relevant to everyday interpersonal perception. Looking into the future, it should be recognized that Facebook is rapidly evolving by the minute and that more studies should be done on personality traits, motivations and self-construals on Facebook use.
REFERENCES


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