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Exploring Communication Identity Management on Facebook

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Exploring Communication Identity Management on Facebook

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Abstract

This study explores the communication phenomenon of online identity management on the social network site Facebook. Using Goffman’s work on identity (1959) and McCormack’s Information Management Theory (1992) as a framework, college student's responses (N = 143) on a 94-item survey about Facebook use were analyzed to examine online identity management and information manipulation. Quantitative study results highlight that high Facebook users are conscious of a need to manage their online identity. Several aspects of Facebook use were important, in particular, connectivity with others, maintaining relationships, promoting a positive image, manipulation of negative image perceptions, and using Facebook to perform an online identity. Also, while low users reported less use and concern with managing an online identity on the quantitative measures--low users' open-ended responses contradicted these assertions. Overall, three qualitative themes from open-ended responses help explain several reasons why, and how, both high and low users in this sample manage an online identity on Facebook: 1) Online Social Attractiveness (i.e., promotion of a positive image online), 2) Online Social Norm Conformity (i.e., attempts to avoid a negative online image), and 3) use of Online Identity Manipulation as a strategy for filtering information to actively manage one's online identity. Both high and low Facebook users reported promotion of a positive online identity as their primary concern.

Keywords: Facebook Identity Management, Information Manipulation, Online Identity, Online Impression Management
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Use of Social Networking Sites (SNSs) continue to become an integral part of people's daily lives (Ellison, Steinfield, & Lampe, 2011; Walther & Jang, 2012; Zhao, Grasmuck, & Martin, 2008). Yet, how identity is created, communicated, and managed through SNSs is an area in need of research to explore how identity is being transformed online. As a construct, identity remains a critical tenet to an individual’s personality; yet, the maintenance of virtual identities via the Internet introduces a new capacity for identity management, while simultaneously extending the scope of what is considered to be fundamental in the construction of human identity. This complex relationship between how identity is communicated and reinforced presents an intriguing intersection of choices for how to create, edit, or otherwise manipulate identity presentation between the online and offline world.

The potential omission of origin, gender, and actual physical characteristics; information that was once considered as naturally inherent to identity, suggests an inquiry of how SNSs, specifically Facebook, facilitate identity management, performance, and potential identity manipulation. Early research on identity suggested a dramaturgical approach when analyzing self-presentation; whereas empirical communication scholarship has suggested causal links between how identity is modified based on variations of the amount of information provided (i.e., ambiguity) and deceptive messaging practices. As an extension of earlier work, contemporary work on identity, information management, and identity management research suggests that both projection and suppression tactics can be observed as being deployed concurrently by the user in an attempt to make one’s virtual identity appear both desirable and authentic (Strano & Queen, 2012).

As a continuation of the current research, this study aims to explore the communication phenomenon of online identity management by establishing a framework of identity through the
review of several theories central to understanding how identity functions as a communicative act. First, Mead’s (1934) conception of the 'I' and the 'Me,’ and Goffman’s (1959) theory of self-presentation and identity, will be reviewed to discuss identity as a communicative act through the performance of everyday interactions that become instinctual and institutionalized. Next, information management practices that aid in the formation or manipulation of identity are explored through theories that provide a transactional view of how messages work to establish the speaker-audience relationship. Lastly, online manipulated characteristics related to identity are covered, leading to several research questions.

**Communicating Identity**

From MySpace to Facebook, the use of social networking sites has become an increasing part of daily lives with one out of every 4 individuals using social networking sites as a way to connect socially (Nielsen, 2012). The incorporation of this kind of computer-mediated communication (CMC) usually involves the use of a virtual persona. One also can choose to create an avatar to stand in their place as a conduit to connect, communicate, and inform users of SNS’s. With so many “friends” available to view, comment, and like what an individual has to say online, SNS’s provide a highly visible and unique forum for individuals to interact. But, what role do SNSs play in communicating identity among people that are connected to our offline world and also those who we interact with only online? And what is the relationship of one's offline identity to an online identity?

In order to understand how identity is communicated online, it is useful to review identity at a conceptual level. Identity conceptually relies on the fragile delineation of “who we are” individually and how we are perceived socially. One aspect of individual identity has been considered inherent and defined by characteristics that are seemingly stable, such as gender and
race; whereas, one’s social identity is created through the mediation and movement between multiple contexts and situations that we encounter on a daily basis. Whether social or personal, initial conceptualizations of identity implied an indisputable essence that cannot be altered due to external circumstances. Characteristics such as age, gender, race, and cultural orientation have often been used as a means to sort and categorize individuals into groups based largely on assumptions that certain behaviors (e.g., heritage, tendencies, and behaviors) are shared amongst members of a certain group.

Identity Theory

As a pioneer in defining the way identity operates, Mead (1934) surmised that identity is made known to others through communication and social behavior. The culmination of the two creates a social identity that ultimately affects the formation of one’s personal identity. For Mead, three concepts were central to his conceptions—meaning, language, and thought—later termed symbolic interactionism by his student Blumer after Mead's death. Meaning is defined as the value that we assign to people or things and our corresponding behavior. Language is used as a method of exchange through symbol use through naming, which ultimately results in collective knowledge. Thought is defined as an individual’s interpretation that is assessed through the assumption of roles outside of “the self”. Through symbolic interaction (i.e., the invocation of meaning, language, and thought), self-concept (aka, identity) is established. In this summation, Mead also establishes a distinct difference between the conceptions of an ‘I’ and a 'Me", where ‘Me’ is one’s social self, and ‘I’ is the response to one’s social identity (Mead, 1934).

As a result of negotiating tensions between one’s enacted self and one’s own perceptions of self, a duality of identity seems natural, particularly considering the numerous ways that
individuals can identify themselves through both roles and behavior. Implications of identity as a performance can be observed in the tension between one’s personal identity and one’s enacted identity. As an example, W.E.B. Du Bois (1903) famously postulated in his groundbreaking essay, The Souls of Black Folks, that the formation of a “double consciousness” was the consequence of having multiple identity characteristics and asserting the duality of navigating post-civil war America as both a Black and a citizen. He explained that “one ever feels his twoness—an American, a Negro.” Du Bois provides support for the multiplicity of selves inherent in identity, and the impact of categorization due to like characteristics. An implication of this is the notion that the self is based largely in the exchange of communication between people.

Later, Erving Goffman’s research on identity creation and management provided a framework for analyzing how identity works in both individual and social situations. Goffman (1959) defined three consistent situations wherein identity is at the forefront of communication through the terms—interaction, face-to-face interaction, and performance. An interaction is defined as “all action that occurs throughout any one occasion when a given set of individuals are in one another’s continuous presence” (p. 15). A face-to-face interaction is defined as “the reciprocal influence of individuals upon one another’s actions when in one another’s immediate physical presences” (p. 15). The last situation that Goffman explains is a performance, which is defined as “all the activity of a given participant on a given occasion which serves to influence in any way the other participants” (Goffman, 1959, p. 15).

In both interactions and face-to-face interactions, identity is represented as inherently belonging to and contained by each individual separately, whereas a performance yields the opportunity of influencing others by some action. Alluding to performance as a position of social interaction, Goffman (1959) uses the analogy of an actor on stage and the relationship that
s/he holds with their audience members; explaining that with the frequency of each performance, social expectations for the actor's performance are also derived. As a result, Goffman suggests that when an individual plays a part s/he “implicitly enters into a relationship wherein s/he requests that their audience accept the performance that they exhibit as well as assume any positive or negative associations with that performance” (Goffman, 1959, p. 16). In this assertion, Goffman suggests that identity can be just as much a performance as it can be inherent—through the behavior of the actor. In addition, Goffman also provides five characteristics of identity performance in action:

Front, the expressive equipment of a standard kind intentionality or unwittingly employed by the individual during his/her performance; Setting, the physical layout,—a setting stays put; performers remain within the scenery; Personal front, the “physical layout, background items which supply the scenery and stage props”; Appearance, any stimuli that function at the time to tell us of the performer’s social statuses and lastly, Manner, any stimuli that will function at the time to warn us of the interaction role the performer will expect to play in the oncoming situation. (Goffman, 1959, pp. 22-26)

Within the context of a performance, the use of all five characteristics can be observed and identified through the actor’s behavior toward his/her audience. Goffman also states that in order for a performance to be accepted by a performer’s audience—setting, appearance, and manner must have coherence. The result of this acceptance is that the actor’s performance is validated as good or true. Specifically, Goffman observes that a good performance can be transformed in that “a given social front tends to become institutionalized in terms of the abstract stereotyped expectations to which it gives rise, and tends to take on a meaning and stability apart
from the specific tasks which happen at the time to be performed in its name” (Goffman, 1959, p. 27), ergo this front becomes a collective representation and taken for granted. By understanding that coherence in performance can establish a framework for identity to be communicated or concealed, Goffman provides additional understanding of how identity is ultimately an assumption by a performer’s audience as an authentic interaction, though it may only be a performance, and therefore indicating that expressions of identity are capable of manipulation within the context of performance.

**Identity Management in Action**

Several researchers offer theories that also observe aspects of Goffman’s framework as a foundation to understand identity in action. For example, Information Manipulation Theory (McCornack, 1992) argues that subtle manipulations of commonly held assumptions in quantity (amount), quality (relevance), relation (veracity), and manner (clarity) when engaging in conversations—may provide valuable insight into how identity is manipulated online by SNS users in a CMC environment. Based in Grice’s (1989) Cooperative Principle of four conversational maxims (quantity, quality, relation, and manner), McCornack’s (1992) Information Manipulation Theory (IMT) holds that messages are commonly thought of as deceptive in practice when Grice’s conversational maxims are violated. While, the foundation of IMT is based in verbal conversations, these assumptions of how to determine the quality a communicative exchange also may offer insight into determining how identity might be managed or suppressed online.

In an empirical evaluation of IMT, researchers found that individuals who actively practice identity management deploy the use of deceptive conversational practices by manipulating the amount or veracity of information that is disclosed to another individual
(McCornack, Levine, Solowczuk, Torres, & Campbell, 1992). Individuals also perceived that manipulations of quality, clarity, and relevance were also viewed as deceptive. As a result, IMT is successful at delineating that there is a vast spectrum of manipulations that can be considered as being deceptive and that multiple violations can be viewed as increasingly more deceptive than single violations of one conversational maxim. This observation may prove useful when applied to the context of SNSs, as it provides an understandable baseline when analyzing subtle communication differences and identity management or identity concealment practices as observed by users within the social networking website.

According to McCornack et al. (1992), violations in quantity occur when a message is deemed to be shorter or longer than the listener’s/audience expectation. In terms of SNSs, that could appear if a user status is a paragraph instead of a quick, five-word blurb or if a status is posted that is one word with no context to accompany it. Violations in terms of quality are considered when conversational content lacks the amount of information worthy of a verbal exchange or actively seeks to not answer questions. Applied to SNSs, a user’s quality could be called into question if the user’s statements or pictures stand in opposition to their overall “performance” as observed by their audience. Violations refer to whether or not the information provided is relevant to the conversation’s consistency. In the case of SNSs, relevant information is also guided by social norms considered in context to what is deemed socially acceptable on social networking sites. Lastly, manner observes the way in which the conversation exchange is performed. On SNSs, conversations can be over a length of time or instantly, so a violation in manner depends on how the conversation is initiated and whether both parties continue to engage or respond within any predetermined response pattern.
Culture, gender, and self-construction also play a vital role in assessing whether or not a message is considered deceptive. When applying IMT across non-western cultures, Lapinski and Levine (2000) discovered that the way that individuals view deceptive messages can differ according to self-construal and other cultural factors. Their research suggests that the emphasis on the deception is ultimately determined by how the culture as a whole operates. Examples of collectivist vs. individualist cultures are offered to provide a difference in perspective from either end of the spectrum. Individuals in collectivist cultures view individual goals as subservient to the goals of the group; therefore deception in these cultures is more readily observed when messages are deemed to be in opposition of the group’s goals. Conversely, individuals from an individualist culture would be more apt to view attempts to increase one’s individual social status as ideal. Though all four maxims also were observed in the study, this research offers an additional aspect of culture to consider when analyzing message content for characteristics of message deception (Lapinski & Levine, 2000).

Identity Management Online

The transition from face-to-face communication to online communication is still a fairly recent phenomenon, as access to the Internet became more affordable for the public in the last 15 years (OCED, 2009). The proliferation of the Internet has afforded humans the ability to communicate across oceans and continents, while consequently increasing their appetite for communication. From the early social networking sites (e.g., chat rooms), the transition to computer-mediated communication as a substitute for face-to-face communication in the early 1990’s ushered in a new context of information management in a virtual context. The impact to self-presentation as a result of online communication as a growing preference to communicate was speculated upon in early the 2000’s as researchers wondered whether individuals that chose
to participate in online communities would do so honestly. An early study on self-presentation online by Bargh, McKenna, and Fitzsimons (2002) suggested two interesting results; users were able to form long lasting, deep-rooted relationships with other users online due to the ability to remain anonymous, and that once those relationships were formed, users projected favorable features onto individuals that they perceived as confidants. The study ultimately suggested that online self-presentation afforded users with the opportunity to express their 'true' self, without the potential for negative repercussions (Bargh et al., 2002).

Social networking sites (SNSs) have grown from an informal network specifically for college students to a social media juggernaut. Boyd and Ellison (2008) define social network sites as websites that allow individuals to construct a public or semi-public profile within a "bounded system," select contacts from a list of connections that are known or unknown to the user, and view their own and other lists of connections that their connections may have (Boyd & Ellison, 2008). Facebook is currently one of the primary SNSs and boasts over 875 million users worldwide. This roughly translates to 1 out of every 12 individuals having a Facebook account in the world (Facebook.com, 2013).

The initial process of becoming a Facebook user involves filling out a blank profile by answering specific questions such as gender, sexual orientation, and country of origin used to construct a "virtual identity" of the user. Additional information such as occupation, formal education, and social-political ideology is also used in order to suggest a connective relationship to other potential ‘friends’. In order to complete a profile, the user is asked to provide a picture as a means of identification. Once the profile is activated, features such as a personalized ‘news feed’ of their friends continual status updates, and the ability to approve (e.g., ‘like’) what an individual or group has said are at the disposal of the user. The driving force behind the power
of Facebook is the notion of real-time communication. Due to the advent of the 24-hour news cycle on cable and satellite television with thousands of stations, this new wave of information gathering is tapped into by social mediums that construct their websites based on real-time statement updates from their large user base.

Identity as performance on SNS’s may incorporate the five characteristics identified by Goffman, as well as Mead's delineation of 'I' and 'Me'. Goffman's front is represented by the virtual user’s consistently performed identity (e.g., a user establishes an identity of being a dog advocate by consistent 'likes' of posts about dogs), the setting (e.g., could be pictures of their own dog posted on their virtual home page), the personal front (e.g., a picture of an individual and their dog(s), appearance (e.g., the culmination of performed front in the setting as pictured), and manner (e.g., the consistency in which the individual 'likes' posts about dogs); all culminate to communicate to their virtual audience that they have an identity of ‘dog-lover’. According to Bullingham and Vasconcelos (2013), users that have an online identity can experience both persona adoption and blended identities through the maintenance of “virtual identities, created and maintained by users” (p. 102). As a result, virtual identities become just as “real” to users as their offline identities, therefore, leaving users unable to negotiate the difference between their virtual self and their non-virtual self (Bullingham & Vasconcelos, 2013).

Turkle has reinterpreted Goffman’s original assumptions into her theory of ‘Cycling Through’ to address the communication of identity in the virtual world. Similar to Goffman (1959), Turkle (1997) surmises that the ease of moving from one identity to another as ‘cycling through’ multiple states of being by the creation of the ‘flexible self’. Turkle suggests that users of CMC are not just role-playing. Instead, they are actually creating multiple definitions of reality that they alternate in and out of. One way to explain this is to imagine a circus performer
prior to a performance. The individual has no makeup, no big red nose or rainbow colored wig to identify them as a clown. Instead, they embody a completely different ‘self’ with completely different governing rules of behavior. They appear ‘normal’, with no clear indication of their secret identity. However, once they are in the center ring, their governing behavior changes into a rambunctious, jokester—an entire other version of themselves. This would be a literal example of the Turkle's flexible-self in practice online. In addition, Turkle argues that this concept of the ‘flexible self’ provides a clear distinction between an individual’s actual identity and their projected self. In this way, Turkle aligns herself with Goffman’s delineation of the claims of a ‘front self’ (or social identity) and a ‘backstage self’ (or personal identity) (Turkle, 1997).

Papacharissi and Mendelson (2011) observe that social networking sites “promote multi-mediated identity-driven performances that are crafted around the electronic mediation of social circles and status” (p. 212). This most recent development indicates a shift in the human-machine relationship from productivity to sociality that “provides unexplored terrain regarding the use of social media to maintain, augment, or diminish an individual’s virtual identity in a social capacity” (Papacharissi & Mendelson, 2011, p. 212). In response to viewing one’s virtual identity as a part of the natural identity, it has also been observed that SNS users deploy multiple suppression management tactics to craft their virtual presentation. Strano and Queen (2012) identify three ways that users manipulate their profile pages—connectivity, multiplicity, and editing (Strano & Queen, 2012). Connectivity refers to the ability to facilitate frequency of use and connectivity to the site—this connects to the idea of the user being on the move and the SNS being able to be experienced in “real-time” as things happen. Multiplicity refers to multiple channels for communication acts to occur (e.g., chat, group messaging, private messaging) with
the user controlling how public or private they want their message to be. Editing allows a user to decide how their image is consumed online.

Strano and Queen apply Goffman’s stage metaphor in interpreting a Facebook profile page as a performance of identity. For example, if a picture is posted that is unfavorable, the user can request to be untagged and report the image to the site. Additionally, the user can limit who can or cannot view their profile content (Strano & Queen, 2012). Furthermore, they also observe:

While we talk about a Facebook profile as belonging to an individual, any given profile also acts as a performance of multiple social groups as the posts and photographs include the “voices” and images of various people interacting with one another. Through this complex exchange of messages, the plots coherency is undermined by “unmeant gestures and faux pas”, such as posting an unflattering photograph or an image depicting socially unacceptable behavior. (Strano & Queen, 2012, p. 168)

Many users attest to the fact that the pervasiveness of Facebook is consistent, intrusive, and commands the user’s attention. When a user ‘likes’ a status update of another user, the author of the status immediately receives an update informing them that their status has been liked. The user is then compelled to check the update because they have been ‘notified’. This is one type of reification that drives the popularity of the medium. By allowing a user’s statement to gain momentum according to how many likes the statement receives, the medium serves as a platform for the validation of the user’s virtual status. One of the tenets of subjectivity asserts that identity is affirmed through language. This type of affirmation validates the user's virtual self. Furthermore, when a certain number of ‘likes’ are achieved, the status statement is then catapulted to the top of the user’s friends real-time feed. In selectively deciding whose
statements are garnered with publicity, the medium is exerting information influence in the feed of multiple users, and thereby manipulating the subjectivity of the user (Barber & Liu, 2011).

Conversely, SNSs can also constrain the manipulation of identity. Examples of these kinds of constraints include the relationship between an image and a spectator, the difficulty to remove images from the medium, and the over-usage of the medium in place of traditional verbal communication. Furthermore, Walther and Jang (2012) suggest that user-generated content may actually undermine a source’s intended impression due to the influence of what their ‘friends’ regard as the user's overall credibility. Furthermore, if the image is not a visual support in favor of the user’s established virtual identity, fragmentation between the user’s audience and the user’s virtual identity is likely to occur (Walther & Jang, 2012).

Although users can remove content, they cannot control who saves and disseminates the content before they go to delete it. Therefore, SNSs have a lack of flexibility in the sense that once a user establishes credibility through the consistency of their posts they are categorized by their posts. Content posted and the content that users “like” create an online identity (e.g., you see a friend that goes to a lot of rock concerts and post those pictures, you equate that the friend likes rock music and any other stereotype that you have about that genre of music). If a user violates their normal posts with a different kind of post, there could be social repercussions, such as de-friending or blocking of the user from former friends (Walther & Jang, 2012).

In addition, some people prefer SNSs in place of traditional verbal communication in order to maintain their sense of connectivity. Research analyzing privacy concerns with SNSs observed that out of 200 people, 41 percent of users willingly befriended and shared personal information with a fake profile created by IT security firm Sophos (Debati et al., 2009, p. 87). Additionally, they also noted that “the habitual use of Facebook and its integration into daily life
indicates that it has become an indispensible tool of social capital and connectedness with large numbers of people” suggesting that this development may tap into a basic human need for affirmation and connection (Debatin et al., 2009, p. 100). Staying connected to the medium means more usage—which can lead to the perception that mundane events are just as newsworthy as true-life events, thus leading to a potential violation of communication expectations and cultural norms due to misunderstood feedback from the user’s social circle of friends.

Additionally, as a result of engaging in social media, studies have also suggested individuals displace the need for individual identification in favor of becoming a part of the collective group voice (Grasmuck, Martin, & Zhao, 2009; Walther et al., 2011). This begins the transition of an individual with a personal identity transforming into a ‘user’ with an espoused online social identity. Additional support for this assertion is found in new research that seeks to reconcile why users prefer to predominantly claim their identities implicitly rather than explicitly (Grasmuck et al., 2009). Grasmuck et al. (2009) provide an insightful look at how individuals prefer to prescribe to a group identity rather than a personal identity. In their findings, they observed that social media users “show rather than tell” and stress group and consumer identities over personally narrated ones. This preference leads to the individual choosing to abandon their personal identity in favor of becoming a part of the online collective.

**Research Questions**

As an extension to the current literature on identity management and identity manipulation on social networking sites, this study will focus on four areas within the social networking site, Facebook, which research suggests are the most edited by users of the medium to determine if edits to users' profiles are related to attempts to manage their online identity
through identity and information management tactics. In order to understand which aspects of Facebook use represent tenets of online identity, this study seeks to analyze which areas within the social networking site people report that they use the most through exploring the principles established by identity management and IMT. Second, in order to quantify how social networking sites encourage or inhibit identity manipulation through communication tools within the medium, this study will analyze which features of the medium people report using to edit/manage their online identity, and why. Third, another goal is to determine how other users respond/communicate online when they catch/or are caught being overly ambiguous, false, or manipulating their identity online. This leads to the following research questions:

RQ1: Which aspects of Facebook do people report using to present and maintain their online identity?

RQ2: How conscious are Facebook users of manipulating their own online identity?

RQ3: How do users respond when they suspect that another user’s identity is not an accurate representation?

Method

The goal of the current study was to survey how Facebook users engage in identity management and information manipulation in order to maintain their online identity. A sample of college students completed a self-report survey. The survey consisted of items that assessed aspects of Facebook that are used to manage online identity, how Facebook encourages or inhibits identity manipulation through online communication, and how users respond/communicate online when they feel others, or they themselves, are being overly ambiguous, false, or manipulating their identity.
online identity. Quantitative analyses, such as correlations and t-tests, were performed, as well as a thematic analysis of three open-ended questions.

Participants

One hundred and forty three (N = 143) undergraduate Communication students at a large Midwestern, Urban University participated in this study (67% female, 32% male). The average age of participants was 22 (Range = 18-32). Since the main focus of the survey was to measure how Facebook is used by young adults to manage an online identity, the major criterion for inclusion in the study was that participants currently maintain one or more Facebook accounts.

Instrumentation

A series of scales were used to explore potential online identity management. An original Facebook Identity Communication Scale (FICS) was developed to assess six conceptual areas—1) Connectivity with others, 2) Relationships with others, 3) Image presentation, 4) Identity manipulation, 5) Multiple online identities, and 6) Online identity performance. A five-item Likert scale was developed to measure each concept area. The FICS measure contains 30 Likert items total with choices ranging from 1 = Strongly Disagree to 5 = Strongly Agree. Several of these scale items were adapted from the Bergen Facebook Addiction Scale (BFAS) (Andraessen, Torsheim, Brunborg, & Pallesen, 2012). In order to assess how often, where (e.g., school/work), and which functions of Facebook participants use, a new 4-item Facebook Use Scale was adapted from Smock, Ellison, Lampe, and Wohn's (2009) 6-item Online Sociability Scale. A second 10-item, Facebook Specific Function Scale was developed to measure respondent's use of particular functions within the Facebook site (adapted from Ellison, Steinfield, & Lampe's, 2007, Facebook Attitude Scale).
Lastly, five scales were included in the survey to measure personality characteristics that may be related to Facebook identity management, in particular: 1) Extroversion, 2) Introversion, 3) External Locus of Control, 4) Internal Locus of Control, and overall 5) Life Satisfaction. These measures were used to assess participant's general orientation toward willingness to communicate with others, desire for control in one's life, and general satisfaction with one's life. All of the survey scales, and example items, will be described in more detail below.

An original, self-report survey containing 94 items (see Appendix) was employed to explore how Facebook users engage in information management in maintaining an online identity. Because no Facebook scale currently exists that measures different conceptual aspects underlying Facebook use for identity purposes, six new scales were developed for this study. Scale reliabilities for each 5-item Likert sub-scale in this sample were: 1) Connectivity with others ($\alpha = .847$), 2) Relational Maintenance ($\alpha = .394$), 3) Image ($\alpha = .303$), 4) Manipulation ($\alpha = .519$), 5) Multiple Identities ($\alpha = .527$), and 6) Performance ($\alpha = .792$).

The survey began with several demographic items (e.g., sex, age, number of Facebook friends), followed by an original 4-item Facebook Use Scale designed to determine frequency of Facebook use. The four-item use scale was adapted from Smock et al. (2011) which assessed frequency of accessing Facebook as a part of the participant’s everyday activity. For this scale, participants were asked to respond regarding how frequently they engage in Facebook activity. Example questions are “How often do you update/change your Facebook page” and “How often do you check your notifications and likes”. Choices ranged from: 1 = 1-2 times per week, 2 = 3-4 times a week, 3 = 5 or more times a week, 4 = Daily basis, and 5 = Several times per day.
A second Facebook Specific Function Scale was used consisting of a 10-item scale adapted from Ellison et al. (2007) which measures frequency of using particular functions of Facebook, such as alerts/updates, likes of content posted, and more. Questions assessed frequency of functions such as “Post personal updates”, “Like/Agree with a friend’s post”, and “Tag yourself in your friend’s posted pictures”. Choices ranged from 1 = Not Frequently, 2 = Occasionally, 3 = Often, 4 = Frequently, and 5 = Very Frequently. Many Facebook functions, however, were not reported to be used by participants on any regular basis, and as a result, this FSFS scale was not utilized in subsequent study analyses.

Next, an original Facebook Identity Communication Scale (FICS) was developed which consisted of six sub-scales and showed strong reliability overall (α = .87). The FICS sub-scales each consist of five Likert scale items ranging from 1 = Strongly Disagree to 5 = Strongly Agree. Each sub-scale will be briefly described next. The first FICS sub-scale measured Connectivity (i.e., participants level of connectivity through Facebook as a communication tool to stay “in touch” with others) (M = 3.14, SD = .94 ). Example items include “Facebook is an easy way to communicate and keep up with my friends” and “When good things happen to me, I share it with my Facebook friends.” Chronbach's alpha for this sub-scale was strong (α = .847).

The second 5-item sub-scale measured Relationships (i.e., the degree participants use Facebook to establish and maintain relationships with others) (M = 2.23, SD = .55). Example statements were “Facebook is how I maintain most of my friendships” and “Facebook is a great way to make new friends.” Chronbach's alpha for this sub-scale was modest (α = .394).

The third sub-scale measured Image (i.e., how users think their friends perceive them as a result of Facebook interaction) (M = 3.00, SD = .56). Statements included “I try to maintain a
positive image on Facebook” and “I think my Facebook profile page reflects how my friends perceive me.” Chronbach's alpha for this sub-scale was somewhat weak (α = .303).

The fourth sub-scale measured Manipulation (i.e., how users attempt to manipulate their online identity by editing or concealing information on Facebook) (M = 2.97, SD = .67). Example items of this sub-scale are “I have removed a post from Facebook because it embarrassed me” and “I have removed a photo of me on Facebook because it was unflattering.” Chronbach's alpha for this sub-scale was moderate (α = .519).

The fifth sub-scale measured Multiple Identities (i.e., whether or not users have more than one Facebook page—in addition to a personal profile page, aka, an alternative online persona) (M = 2.05, SD = .65). Statements included “I have more than one Facebook profile page” and “I post comments or pictures under an alias or alter-ego on Facebook.” Chronbach's alpha for this sub-scale was moderate (α = .527).

The sixth sub-scale measured Performance (i.e., whether or not users adapt their Facebook activity based on their Facebook “audience”) (M = 2.75, SD = .86). Example statements are “I feel like my Facebook friends are my audience for expressing ideas” and “If I receive a lot of likes or comments on my posts, I feel rewarded.” Chronbach's alpha for this sub-scale was strong (α = .792).

The remaining 5 scales were used to measure personality characteristics. First, a 5-item Extroversion scale was adapted from Gulliford (1933) to measure extroversion (i.e., desire to engage with others), and a 5-item Introversion scale (i.e., lack of desire to engage with others) was employed. Participant responses ranged from 1 = Strongly Disagree to 5 = Strongly Agree. Example statements are “I enjoy meeting new people” (extroversion) and “I don’t like to be in
social situations where I don’t know anyone” (introversion). In addition, Ferguson's (1993) measures of Locus of Control were adapted to assess whether or not participants held an internal locus of control (i.e., they believe they are in control of life events), or an external locus of control (i.e., they believe things happen in their lives beyond their control). Statement examples include “If I plan out my actions, I can usually avoid negative outcomes” (Internal LOC), versus statements such as “Sometimes I feel that I don’t have enough control over the direction my life has taken” (External LOC). Finally, a life satisfaction scale was adapted from Pavot and Denier (1993). This 5-item scale assesses overall life satisfaction, and includes items such as “In most ways my life is close to my ideal” and “So far I have gotten the important things I want in life.”

At the end of the survey, three open-ended questions were used to solicit participants' perceptions of their Facebook use in their own words, and to further explore online identity issues in greater detail. Participants were asked to provide written responses to the three questions. Ninety-four participants (66%) answered the open-ended questions. Responses ranged from a few words to a moderate-length paragraph. Qualitative responses were analyzed for conceptual similarity, and dominant themes emerged, in line with a constant comparison approach (Glaser & Strauss, 1967).

Procedure

Survey participants consisted of undergraduate communication students at a large urban Midwestern university who were 18 years or older. The study was approved by the university's Institutional Review Board (IRB Approval #2014-0001). Participants were recruited during normally scheduled classes in the Department of Communication. Hard copy surveys were distributed by Course Instructors that included an informed consent page explaining the study.
Surveys were distributed at the beginning of a class session. In compliance with Institutional Review Board guidelines, the informed consent script was read to students in-class to explain the purpose of the survey and determine desire to participate. Once students indicated interest by raising their hand to participate, surveys were handed out for students to complete. Agreement to participate served as consent. Instructors collected completed surveys and returned them to the researcher in a large envelope. Surveys were self-report, anonymous, and voluntary. Three hundred and fifty-one students were asked to participate, 143 volunteered, yielding a response rate of 40%.

Data Analysis

Frequencies, means, and standard deviations for scales were used to determine how Facebook users report engaging in image management and information manipulation in maintaining an online identity (RQ1). Also, correlations were explored, and several t-tests were used to explore potential differences between Facebook user groups based on usage patterns. Using the Facebook Use Scale, low Facebook users were identified as participants who's 4-item average was between 1.0 and 2.9 (n = 58). High users 4-item average was in the range of 3.0 to 5.0 (n = 84). Independent t-tests were conducted on all six FICS sub-scales to identify potential differences between high and low Facebook users. In addition, potential sex differences on the FICS concept areas were explored. Finally, the 5-item FICS manipulation sub-scale and qualitative, open-ended responses were analyzed to assess participant's awareness of how they may choose to alter their online identity (RQ2), and how easily they perceive identity manipulation by others on Facebook (RQ3).
Results

Quantitative Survey Measures

In order to explore whether the six FICS conceptual areas are related to one another conceptually, a correlation matrix was examined (see Table 1). Several of the FICS concepts were significantly correlated providing support that the sub-scales are measuring areas of Facebook online identity management that are logically related. Specifically, Connectivity was significantly correlated with all of the other variables—Relationship, Image, Manipulation, Multiple Identities, and Performance. Relationships was correlated significantly with Image, Manipulation, Multiple Identities, and Performance. Presenting a positive Image was significantly correlated with Connectivity, Relationships, and Performance, but was not correlated with Manipulation or Multiple Identities. All of the FICS sub-scales were associated in ways that are consistent with conceptual expectations.

Table 1. Correlations of the Six FICS Concept Areas

<table>
<thead>
<tr>
<th></th>
<th>Connectivity</th>
<th>Relationships</th>
<th>Image</th>
<th>Manipulation</th>
<th>Multiple ID</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connectivity</td>
<td>.528**</td>
<td>.310**</td>
<td>.315**</td>
<td>.193*</td>
<td>.593**</td>
<td>.587**</td>
</tr>
<tr>
<td>Relationships</td>
<td>.310**</td>
<td>.242**</td>
<td>.258**</td>
<td>.440**</td>
<td>.313**</td>
<td>.315**</td>
</tr>
<tr>
<td>Image</td>
<td>.315**</td>
<td>.242**</td>
<td>NS</td>
<td>NS</td>
<td>.223**</td>
<td>NS</td>
</tr>
<tr>
<td>Manipulation</td>
<td>.193*</td>
<td>.440**</td>
<td>NS</td>
<td>NS</td>
<td>.313**</td>
<td>.315**</td>
</tr>
<tr>
<td>Multiple ID</td>
<td>.593**</td>
<td>.587**</td>
<td>.313**</td>
<td>.315**</td>
<td>.339*</td>
<td>NS</td>
</tr>
<tr>
<td>Performance</td>
<td>.587**</td>
<td>NS</td>
<td>.313**</td>
<td>.315**</td>
<td>.339*</td>
<td>NS</td>
</tr>
</tbody>
</table>

Note: p ≤ .05*; p ≤ .001**

Additionally, correlations between the six FICS concept areas and the five personality scales were explored (see Table 2). Only two of the FICS concept areas were positively correlated with the personality characteristic measures. Positive Image was significantly
correlated with Extroversion and Internal locus of control. Using Facebook as a Performance vehicle was positively correlated with Introversion, but negatively correlated with Extroversion. No other FICS concepts were correlated with the personality characteristics.

Table 2. Correlations of the FICS areas with Personality Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Image</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extroversion</td>
<td>.18*</td>
<td>-.19*</td>
</tr>
<tr>
<td>Introversion</td>
<td>NS</td>
<td>.17*</td>
</tr>
<tr>
<td>External LOC</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Internal LOC</td>
<td>.19*</td>
<td>NS</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>NS</td>
<td>NS</td>
</tr>
</tbody>
</table>

Note: p ≤ .05*

Finally, correlations among the five personality characteristics, themselves, were explored to examine relationships between these variables (see Table 3). Correlations between the personality characteristics were conceptually consistent and demonstrated both convergent and divergent validity of binary concepts as expected. Extroversion was significantly correlated with possessing an Internal locus of control and Life Satisfaction, and negatively correlated with Introversion. Introversion was significantly correlated with possessing an External locus of control, and negatively correlated with Extroversion and Life Satisfaction. The correlations serve as a criterion validity check that the scales used in the study are measuring these concepts as intended. Overall, the correlation results suggest that users who identify as extroverted are satisfied with their life in its current state, and may use identity management tactics online to maintain a positive image, rather than focusing on manipulation of identity-related information.
Conversely, users who identified as introverted were not satisfied with life, and report performing online identity management tactics as in order to augment or enhance their image online.

Table 3. Correlations of Personality Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Extroversion</th>
<th>Introversion</th>
<th>Ext LOC</th>
<th>Int LOC</th>
<th>Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extroversion</td>
<td></td>
<td>-.22**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introversion</td>
<td>-.22**</td>
<td></td>
<td></td>
<td></td>
<td>-.17*</td>
</tr>
<tr>
<td>External LOC</td>
<td>NS</td>
<td>.18*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal LOC</td>
<td>.30**</td>
<td></td>
<td>-.17*</td>
<td>.18*</td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>.31**</td>
<td>-.17*</td>
<td>.18*</td>
<td>.18*</td>
<td></td>
</tr>
</tbody>
</table>

Note: p ≤ .05*; p ≤ .001**

Next, in examining the data, there was a clear split between two types of Facebook users in this sample—a low user group (n = 58), which consisted of using Facebook between one and four times per week, and a high user group (n = 84) who reported using Facebook at least once daily to several times a day. More specifically, the Facebook Use Scale asked about four areas: 1) overall Facebook usage during school and work—47% (n = 65) reported 4 times or less per week, whereas 48% (n = 66) reported daily to several times per day of Facebook use, 2) checking their Facebook wall anywhere—45% (n = 54) of users reported that they check their walls 4 times per week or less, whereas 49% (n = 70) of users reported that they check Facebook every day and sometimes multiple times per day, 3) checking notifications and likes—39% (n = 55) of users reported that they check their notifications/likes 4 times per week or less, whereas 53% (n = 76) of users reported that they check their notifications/likes daily and sometimes several times per day, and finally, 4) 87% (n = 125) of users reported that they change/update their profile picture between 1-4 times per week. These results align with previous research conducted by Strano and Queen (2012) who suggested that some users frequently check their
user profiles in order to maintain “real-time” connectivity. This study's results indicate that Facebook was reported to be used differently by these two groups. As a result, several subsequent analyses were conducted to compare the high versus low user groups on the study variables. Independent $t$-tests were performed on all six FICS conceptual areas to see if high vs. low user behavior differed across the aspects of Facebook identity management. Four concepts areas—Connectivity, Relationships, Manipulation, and Performance all showed a significant difference between high and low users.

**Table 4. Significant $t$-tests for High vs. Low Group Means on FICS sub-scales**

<table>
<thead>
<tr>
<th>Concept</th>
<th>Mean for High User</th>
<th>Mean for Low User</th>
<th>Significant $p \leq$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connectivity</td>
<td>3.5</td>
<td>2.6</td>
<td>0.001</td>
</tr>
<tr>
<td>Relationships</td>
<td>2.3</td>
<td>2.1</td>
<td>0.05</td>
</tr>
<tr>
<td>Manipulation</td>
<td>3.1</td>
<td>2.7</td>
<td>0.05</td>
</tr>
<tr>
<td>Performance</td>
<td>2.9</td>
<td>2.5</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Lastly, potential sex differences in reporting the FICS conceptual areas were explored. Of the six FICS concepts, only a $t$-test of the Relationships sub-scale was significant [$\text{Males} = 2.4; \text{Females} = 2.1; t = 2.57, (df = 141) p \leq .05$] indicating that male participants may perceive Facebook slightly more favorably as a tool for establishing and sustaining relationships than females in this sample. However, both group means were on the lower end of the scale for using Facebook for these purposes.

**Qualitative Open-Ended Analysis**

Qualitative statements from participant open-ended responses were evaluated to identify reoccurring themes. Three dominant themes emerged, 1) Online Social Attractiveness, 2) Online Social Norm Conformity, and 3) Online Identity Manipulation, which address this study's
research questions about how conscious Facebook users are of manipulating their online identity (RQ2) and whether or not they can tell when others are not being forthcoming related to their online identity (RQ3). The three dominant themes reflect online social pressures that respondents described as driving their need to be conscious of, or manipulate, information related to their online identity. The themes emerged for both the high and low Facebook users as a) a pressure to appear attractive, b) a pressure to conform to norms, and c) needs to manipulate information. Within each theme, three areas emerged that drive Facebook identity presentation: a) peer pressure, b) family or organization pressure, and c) future employer pressure. Each dominant theme and sub-themes will be described next.

The first theme, *Online Social Attractiveness*, was expressed by both high and low Facebook users as a need to have positive social attractiveness as one of the main reasons to consciously filter content around their online identity. Table 5 presents representative example quotes for each sub-theme. Peer pressure was articulated as a major factor for users to use identity management tactics as a means to maintain a “socially attractive image.” High Facebook users suggested that one reason why they engage in identity management tactics online is because they actively seek online connection with members of their peer group, but want to make sure they are perceived positively. Both high and low users stated that they also felt pressure from authoritarian figures, such as their parents, teachers, and families in general, to present "socially attractive online personas," suggesting that both familial and organizational pressures (i.e., teachers) were possible reasons to think twice about posts made on Facebook. Also, the desire to be socially attractive to future potential employers was expressed as a reason to present and maintain a positive online identity by both user types.
Table 5: Online Social Attractiveness Representative Statements

<table>
<thead>
<tr>
<th>Purpose</th>
<th>High Facebook User (n=83)</th>
<th>Low Facebook User (n=52)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Attractiveness to Peers</td>
<td>“Since all your friends and acquaintances have a FB profile, you feel pressured to have as well as have the perfect profile; to send the message that you are good looking and have a good life.”</td>
<td>“Yes, when I was younger it was important to look a certain way on Facebook so others thought of me positively”</td>
</tr>
<tr>
<td>Social Attractiveness to Family/Organizations</td>
<td>“…knowing that my family members are on Facebook causes me to censor some things. I also try not to be controversial in order to not make others mad”.</td>
<td>“Yes, I am a football player and I have to show that positive image to other people [who] look up to me”</td>
</tr>
<tr>
<td>Social Attractiveness to Future Employers</td>
<td>“Yes because jobs look into your FB/social network so since I’m not of age to drink, I try not to post pictures of me with alcohol”</td>
<td>“Yes, I want to be profession and classy in case future employers look at my page”</td>
</tr>
</tbody>
</table>

A second related dominant theme was pressure for Online Social Norm Conformity by both types of users (see Table 6). Eighty-three percent of high users (n = 69) affirmed that they had felt pressure, either currently or in the recent past, to conform to a certain kind of image on Facebook, and 63% of low users (n = 33) also did. Both high and low users felt pressure to conform to social norm expectations of their peers. Also, both stressed that frequent image management was engaged in as part of one’s familial obligation to conform to a ‘certain kind’ of family identity (i.e., reputation).

Table 6: Online Social Norm Conformity Representative Statements

<table>
<thead>
<tr>
<th>Purpose</th>
<th>High Facebook User (n=83)</th>
<th>Low Facebook User (n=52)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conformity to Peers</td>
<td>“Yes, because I feel like some people expect me to act a certain way, but if my posts or pictures do not align in their eyes then I get questioned and feel cornered by”</td>
<td>“Yes, I feel pressured to keep up with my peers that are doing fun and interesting things, like posting pictures from their trips abroad. I feel like I need to post happy, fun, impersonal things. There is”</td>
</tr>
<tr>
<td>Conformity to Family/Organizations</td>
<td>“Yes, the pressure from family members and old friends to stay wholesome. Sometimes when you’re friends with your family on Facebook, you don’t feel like you can really be yourself”</td>
<td>“Yes, a lot of my family (grandma, mom, aunts, cousins, etc)... I feel that I cannot make myself seem what they don’t expect of me. My family has very high standards of me and I don’t want them to think I am not the person they think I am”</td>
</tr>
<tr>
<td>Conformity to Future Employers</td>
<td>“…I feel the need to make sure what I post is not rated anything worse than PG 13 because the internet is forever! I don’t want something to bite me in the butt when I graduate and try to get a job,”</td>
<td>“Yes, I feel that I need to keep my Facebook clean now because jobs will look you up on Facebook before hiring.”</td>
</tr>
</tbody>
</table>

The third dominant theme was *Online Identity Manipulation*. Here, both high and low users described feeling they need to engage in manipulation of the types of information they post on Facebook to peers, family, and employers. Both user types explained *how* they had at one time or another added or removed images of themselves online with the intention of *increasing* their social attractiveness to other users. Seventy-nine percent of high users responded that they purposely “keep posts clean” in order to maintain a positive image either due to familial obligations or professional aspirations. This theme aligns with the first theme, *Online Social Attractiveness*, because Facebook users admitted to consciously manipulating online information to manage their online identity. More specifically, almost half (48%) of low users admitted to consciously posting only ‘attractive’ pictures of themselves and un-tagging themselves from pictures that they perceived as ‘unattractive.’ In general, all users noted negative repercussions of being too candid on Facebook indicating that pressure from one’s peers, family, or employers as a motivating factor to engage in information manipulation to achieve a more favorable image.
<table>
<thead>
<tr>
<th>Purpose</th>
<th>High Frequency User (n=83)</th>
<th>Low Frequency User (n=52)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identity Manipulation for Peers</td>
<td>“Yes, when I was in high school mostly. Everyone posted pictures of their weekends and what they did. I felt obligated to do the same and wanted to seem “cool”. So I posted a lot of drinking pictures at parties to look like a popular person”</td>
<td>“I erase pictures I was tagged in and erase things I’ve said in the post”</td>
</tr>
<tr>
<td>Identity Manipulation for Family/Organizations</td>
<td>“Keep posts clean”</td>
<td>“I am friends on Facebook with several key figures relevant to my professional life and I always think about them and what they might think before I post anything. It has caused me to not post material, edit posts, and delete things off of my wall”</td>
</tr>
<tr>
<td>Identity Manipulation for Employers</td>
<td>“Yes because jobs look into your FB/social network so since I’m not of age to drink, I try not to post pictures of me with alcohol”</td>
<td>“I have to delete pictures of me that would give me a negative image”</td>
</tr>
</tbody>
</table>

Lastly, participants were also asked how they respond when they suspect that another user’s identity is not an accurate representation (RQ3). A majority [62% (n = 51) of high users; 67% (n = 32) of low users] responded that the only way that they could truly detect if another Facebook user was being untruthful was if they knew that individual in real life—offline. One respondent stated, “You will honestly never know unless you know that person very personally or know about the situation firsthand." Another person offered, “If you know the person outside of Facebook it’s pretty easy to know they may portray a completely different personality.” Overall, respondents felt it is very difficult to know if someone is manipulating their online identity unless that person is a member of one's close personal relationships offline.
Comparing Quantitative and Qualitative Responses

An interesting contradiction emerged in comparing high and low users' quantitative and qualitative responses. High users (M = 3.1, SD = .58) were significantly more likely to report manipulating their Facebook identity than low users (M = 2.8, SD = .76) on the FICS manipulation sub-scale [t = -2.81, (df = 141), p ≤ .05]. However, in the open-ended responses, both groups reported needing to consciously manipulate their online identity. Only 23% (n = 19) of high users stated that image maintenance on Facebook was unimportant, whereas 36% of low users (n = 19) stated that they did not feel pressure to maintain a positive image on Facebook. Yet, when the quantitative and qualitative survey responses of the low users were compared, 79% contradicted. As an example, one low user stated, “No, I don’t use Facebook very often. It is a small part of my life. I only use Facebook to look at pictures. I would like to have a positive image on Facebook rather than a negative one. I keep my problems/drama off of social media,” but when crosschecked against their answers to an explicit question on the Image sub-scale--"I try to maintain a positive image online” the user answered ‘Strongly Agree’. Furthermore, when asked if the user engaged in Image maintenance, specifically removing tagged photographs from their profile page, the user answered ‘Often’ indicating that contrary to this user’s qualitative assertion that Facebook is a ‘small part’ of their life, they actually contradict themselves about engaging in frequent online identity management. In another example, a low user noted, “No, I can post on my Facebook whatever I would like to. I don’t need to impress anyone because they should just like me for who I am. I don’t post things for the pressure of others most times,” thus suggesting a contradiction between expressed self-confidence, yet feeling a need to conform to external pressures on Facebook. Inconsistencies, such as these, between low users' quantitative and qualitative responses were prevalent, suggest an overall trend that both types of users are
concerned with online identity management when they do utilize Facebook. Ultimately, low Facebook use may not mean that online identity management is of low importance to all users.

**Discussion**

Findings in this study indicated there were two types of Facebook users in this student sample, high and low. Quantitative results indicate that high Facebook users were more likely to utilize Facebook to post messages, "like" other peoples’ posts, and more likely to manipulate their online identity by removing unflattering pictures or statements as part of their online identity management tactics. High users (e.g., users who update their profile daily or multiple times per day) consistently reported maintaining their profile during work and school, in addition to monitoring their notifications and likes. This information suggests that high Facebook users are not only aware of, but also actively engaged in, performance-based presentations of identity when online.

In addition, when high versus low users were compared on the six Facebook Identity Communication Scale (FICS) dimensions, high users reported significantly more use of four Facebook aspects: 1) maintaining connectivity with others, 2) establishing relationships, 3) manipulating their information, and 4) viewing Facebook as a tool for identity performance. These results suggest high users are likely more conscious of utilizing Facebook as an identity online tool and report engaging in more identity management and manipulation tactics in order to maintain more control of their online identity than the low user group.  This observation aligns with previous findings by Strano and Queen (2012) who suggest that users deploy different types of identity maintenance methods, specifically editing, as a means to establish and maintain connection with their respective peer group. Strano and Queen also noted that, “any given
profile also acts as a performance of multiple social groups” which would suggest another reason why image maintenance occurs frequently.

Another possible contributing factor for frequent identity maintenance online could be that users actively engage in online identity manipulation because this kind of manipulation can go undetected by other users. All of the open-ended responses indicated that it is very difficult to tell if someone is engaging in online identity manipulation if you don't know them offline. This finding aligns with Lapinski and Levine's research (2000) which suggests that although the way individuals view online deceptive messages can differ, an emphasis on deception is ultimately determined by how the culture as a whole perceives some level of online identity manipulation as normal. This could imply that since users believe that subtle manipulations of the truth cannot be perceived by themselves, they also cannot be perceived by others, therefore perpetuating cultural norms for "online identity manipulation" rather than concerns about how closely online and offline identities match up. This was articulated well by one high user who noted, "Yes, when I was in high school mostly. Everyone posted pictures of their weekends and what they did. I felt obligated to do the same and wanted to seem “cool”. So I posted a lot of drinking pictures at parties to look like a popular person.” These kinds of assertions could offer a good explanation for the significant correlations found between Connectivity, Relationships, and Identity manipulation, and Facebook Performance for high users.

Reports of maintaining multiple online identities, however, were in the low range overall (M = 2.0, SD = 1.10), and there was no significant difference between high (M = 2.1, SD = .71) versus low (M = 2.0, SD = .55) users [t = -1.14, (df = 141), NS]. Thus, few respondents reported creating and using multiple Facebook identities. This finding aligns with previous research by Papacharissi and Mendelson (2011) who suggest that social networking sites, like Facebook,
already promote “multi-mediated identity-driven performances...in order to maintain, augment, or diminish an individual’s virtual identity in a social capacity” (p. 212). This may indicate that these college students do not feel a need to create multiple online identities, and that overall users choose to represent themselves with one profile page through a multitude of ways in order to present an online identity that they want to present.

Interestingly, many of the FICS scale means were in the neutral range, for example, both high (M = 3.0, SD = .53) and low users (M = 2.9, SD = .60) were equally neutral in reporting promotion of a positive image on the Image sub-scale, and there was no significant difference between the two groups [t = -.98, (df = 140), NS]. Thus, the quantitative results, overall, reflect a rather moderate level of awareness of consciously promoting a positive online identity (RQ2). In looking at sex differences, the only significant difference found was that male participants in this study reported using Facebook more to maintain relationships than females. Here, one explanation could be that online self-presentation affords male users the opportunity to be more open and express their identity with less pressure to conform to offline masculine social norms of less emotion-focused and personal communication, and there may be less potential for negative social repercussions online (Bargh, McKenna, & Fitzsimons, 2002). Future research could expand on this finding by asking males why they may feel more comfortable maintaining relationships online than females.

Another contribution of this study is the creation of a Facebook Identity Communication Scale (FICS). Further testing of the measure, however, is required in future research on identity management practices on Facebook to explore the sub-scale validity and reliability in other samples. The unique 30-item scale showed high internal reliability (α = .85) in this student sample indicating that aspects of the 30-item scale may be useful in measuring online identity
management in future studies. High users (M = 2.8, SD = .46) were significantly more likely than low users (M = 2.4, SD = .40) to report utilizing the six FICS concepts [t = -5.06, (df = 140), p ≤ .001]. Several of the sub-scale reliabilities were moderate to weak. Additional item development and testing should be pursued in future studies to further explore use of the FICS in assessing online identity management.

Finally, the personality characteristics explored in this study indicate that both introverted and extroverted users are aware that they employ identity management tactics to promote a more socially-desirable online identity; however, they do so in different ways. Extroversion was positively correlated with an internal locus of control, life satisfaction, and positive image suggesting that extroverted users were more concerned with maintaining a positive image by controlling and filtering out negative content in order to promote a positive image online. These results align with previous research by Rosenberg and Egbert (2011) suggesting that personality traits and concerns for secondary communication goals can act as predictors for how users will deploy identity management tactics online. Conversely, Introversion was positively correlated with viewing Facebook as a place for online performance and an external locus of control. This suggests that perhaps introverted users view Facebook as a more effective way to communicate a positive image than offline because they are able to manipulate their online identity to create a more socially desirable online persona. This kind of manipulation may augment introverted Facebook user's ability to establish a positive offline identity.

**Identity Theory and Facebook Identity Management**

Previous literature suggests that identity is made known to others through communication and social behavior (Mead, 1934). Goffman (1959) proposed that identity is constructed through
the enactment of one’s performed self through social interaction and the maintenance of social expectations. McCornack's work (1992) reinforced both Mead and Goffman’s original assertions through his exploration of the manipulation of Grice's conversational maxims of quality, quantity, veracity, and manner as a means of identity management and manipulation. This study's results add to this literature by focusing on online identity management through the medium of Facebook and lends support for the notion that identity theories do apply to the online environment (Strano & Queen, 2012), yet this study further extends the previous dimensions of identity that have been studied in the context of Facebook by adding a focus on identity manipulation.

High Facebook users in this study reported using Facebook in line with McCornack’s (1992) Information Manipulation Theory (IMT), which proposes that people employ subtle manipulations of commonly held assumptions regarding appropriate levels of quantity (amount), quality (relevance), relation (veracity), and manner (clarity), to manage their online identity. For example, high users in this study described conscious Facebook censorship due to identity concerns. As one participant stated, “[the fact]…that my family members are on Facebook causes me to censor some things…” suggesting that social pressures from other individuals, such as family members, could be a significant cause of subtle manipulations in online identity presentation. High users in this study also reported use of manipulative practices of the amount (quantity) of information disclosed in line with McCornack et al.'s results (1992). Also, participants reported alignment with McCornack’s definition of identity manipulation, and Strano and Queen’s (2012) proposition that online message editing is sometimes necessary in order to maintain coherence with one’s offline identity.
In addition, some participants eluded to the idea that subtle manipulation of quantity, quality, relation, and manner could be used to amplify their online identity’s social attractiveness. One participant stated that in order to seem "cool" they “…felt obligated to [post] a lot of drinking pictures at parties to look like a popular person.” This suggests that identity manipulation may be a response to peer pressure and the personal need to be perceived as socially desirable.

High Facebook users’ reports of employing all of the FICS dimensions are in line with Goffman’s (1959) notion of Identity Performance. For example, his concept of performed identity most closely aligns with the FICS concepts of image and performance. Connectivity aligns with the combination of setting, personal front, and manner because continued online identity management requires the use of an established online identity via consistency of posts and statements. The more consistent posts are, the more reified one’s online identity becomes. One reason could be due the increased use of online social networks to enhance offline social network interactions. One high user surmised, “[Facebook] is becoming the new first impression. Since anyone can view it, you should want to hold yourself to the standard of how everyone will be able to see you.” Thus, performance of online identity is managed through manipulation of Goffman's notions of setting, personal front, appearance, and manner through concealment or removal of unflattering pictures and alignment of likes and posts that reinforce one's online identity.

The research on identity and social networking sites suggest that social networking sites may promote multi-level identity-driven performances that are fueled by a desire to maintain social networks and positive social status (Papacharissi & Mendelson, 2011). Other studies have found that users enhance their desirability by manipulating their profile pages through
connectivity (i.e., the ability to facilitate frequency of use and connectivity to the site), multiplicity (i.e., multiple channels for communication acts to occur and user control of how public or private they want their messages to be), and editing (i.e., allowing a user to decide how their image is consumed online) (Strano & Queen, 2012). The current study adds further support that, at least for the high Facebook user college students, there was consistent evidence of conscious manipulation of their online identities. Low users also may engage in online identity management and manipulation yet may be less aware they do.

**Limitations**

Although the findings of this study provide valuable insight into online identity management, there are several limitations. First, the sample of undergraduate communication students was a voluntary, convenience sample which may have influenced the number of high frequency Facebook users. Communication Majors may be more likely to engage with social media for communication purposes than other college majors. Also, the study findings cannot be generalized beyond this sample. Future studies should recruit larger non-random, and random, samples to explore the generalizability of these results, and should employ additional conceptually related measures to confirm criterion validity and reliability of the FICS scale. An additional limitation was time constraints. Due to several delays from IRB staffing changes at the university, the 30-item FICS scale was not able to be pilot tested. Although the overall FICS scale had strong reliability in this sample ($\alpha = .847$), several of the sub-scales had moderate reliabilities, and two sub-scales showed weak reliability. Further item testing and adaptation is needed to develop a stronger FICS measure. In addition, due to the nature of the survey being a self-report, there is a risk that participants may not have been completely honest about how or why they engage with other users via Facebook. Also, it is possible survey respondents may not
have given much prior consideration to their Facebook use or potential online identity management.

**Conclusion**

Study results highlight that high Facebook users are conscious of a need to manage their online identity. Several aspects of Facebook use were important to this end, in particular, connectivity with others, maintaining relationships, promoting a positive image, manipulation of negative image perceptions, and using Facebook to perform an online identity. Also, while low users reported less use and concern with managing an online identity on quantitative measures--low users' open-ended responses contradicted these assertions. Overall, three qualitative themes help explain several reasons why, and how, participants manage an online identity on Facebook: 1) Online Social Attractiveness (i.e., promoting a positive image online), 2) Online Social Norm Conformity (i.e., attempts to avoid a negative image online), and 3) use of Online Identity Manipulation as a tactic for filtering information to actively manage one's online identity. Both high and low Facebook users reported that promotion of a positive image on online was their primary concern. Additional research on communication and online identity management is warranted. Future research on online communicative practices may reveal new insights into frequency of use, needs, and strategies for maintaining online connectivity, and how sustaining a positive online identity may take on even more importance as new technologies continue to become an integral part of everyday life in society.
References


APPENDIX

Facebook Communication Identity Management Survey

Directions: The study is designed to explore how people feel about their Facebook profile identity. Please fill out this survey only if you are over the age of eighteen. The survey will take 10 minutes to complete.

Demographics

1. Your age (in years)

2. Your sex
   1 = Male   2 = Female

3. Do you have a Facebook Profile Page?
   1 = Yes   2 = No

4. About how many total Facebook friends do you have?
   0 = 10 or less   1 = 11-50   2 = 51-100   3 = 101-150   4 = 151-200   5 = 201-250   6 = 250-300   7 = 301-400   8 = more than 400

Facebook Use Scale

Scale of Measurement

1 = 1-2 times a week
2 = 3-4 times a week
3 = 5 or more times a week
4 = Daily basis
5 = Several times a day

5. How often do you update/change your Facebook profile page?
6. How often do you use Facebook during work or school?

7. How often do you check your Facebook wall?

8. How often do you check your notifications/likes?

**Facebook Specific Function Scale**

**Scale of Measurement**

1 = Not Frequently

2 = Occasionally

3 = Often

4 = Frequently

5 = Very Frequently

1. Send/Receive messages (privately)

2. Post personal status updates

3. Like/Agree with a friends’ status.

4. Post comments on a friends’ wall

5. Post profile pictures of yourself or others

6. Tag yourself in your friend’s posted pictures

7. Post about your activities/hobbies/interests

8. Post about TV shoes
9. Post about events of interest

10. Remove picture tags of yourself from your friend’s picture

**Facebook Identity Communication Scale (FICS)** (six conceptual areas)

**Scale of Measurement**

1 = Strongly Disagree

2 = Slightly Disagree

3 = Neutral

4 = Slightly Agree

5 = Strongly Agree

**Connectivity**

1. Facebook is a part of my everyday activity.

2. I feel out of touch when I haven’t logged on to Facebook for a while

3. I would be upset if Facebook was shut down or unavailable to me.

4. Facebook is an easy way to communicate and keep up with my friends.

5. When good things happen to me, I share it with my Facebook friends.

**Relationships**

6. I feel more comfortable saying things on Facebook than I do in a face-to-face scenario.

7. I know most of my Facebook friends on a personal basis.

8. Facebook is how I maintain most of my friendships.
9. I worry about what my friends think about some of the things I post on Facebook.

10. Facebook is a great way to make new friends.

*Image*

11. I feel comfortable giving my opinion about a situation via Facebook.

12. I try to maintain a positive image on Facebook.

13. I think my Facebook profile page reflects how my friends perceive me.

14. When I think one of my friends is lying on Facebook, I will call them out on their page/post.

15. I never worry about what I post on Facebook.

*Manipulation*

16. I have removed a post from Facebook because it embarrassed me.

17. If someone posts a comment on my Facebook page that I don’t like, I delete it.

18. I have lied about my relationship status on Facebook.

19. I can tell if one of my Facebook friends isn’t telling the “whole” truth.

20. I have removed a photo of me on Facebook because it was unflattering.

*Multiple Identities*

21. I have more than one Facebook profile page.

22. I post comments or pictures under an alias or alter-ego on Facebook.

23. I think people who have an alter-ego profile page are afraid to be themselves.

24. My alter-ego profile on Facebook is different than my regular profile on Facebook.

25. My alter-ego profile reflects my creativity more than my regular profile does.
Performance

_____ 26. Facebook is my platform to say anything I want to the world.

_____ 27. I feel like my Facebook friends are my audience for expressing ideas.

_____ 28. If I receive a lot of likes or comments on my posts or pictures, I feel rewarded.

_____ 29. I like when Facebook friends tell me I'm entertaining.

_____ 30. The more likes/comments I receive on a post, the more I try to make similar posts.

Personality Trait Scales

Scale of Measurement

1 = Strongly Disagree

2 = Slightly Disagree

3 = Neutral

4 = Slightly Agree

5 = Strongly Agree

Introversion

_____ 1. I don’t like to be in social situations where I don’t know anyone.

_____ 2. I’d rather hear about an event that happened than actually be present for it.

_____ 3. I am more likely to keep quiet in unfamiliar surroundings.

_____ 4. I get nervous in social situations.

_____ 5. I will re-write/proofread an email more than once before I send it.
Extroversion

_____ 6. I enjoy meeting new people.

_____ 7. I normally persuade others to my point of view.

_____ 8. I prefer to work with others than alone.

_____ 9. I normally take the lead during group activities.

_____ 10. I express myself better verbally than in writing.

Internal Locus of Control

_____ 11. I control my own destiny.

_____ 12. If I plan out my actions, I can usually avoid negative outcomes.

_____ 13. When good things happen to me, it’s because I worked hard to make it happen.

_____ 14. I believe that I can do anything that I put my mind to.

_____ 15. If someone is unhappy with their circumstances, they should do something to change it.

External Locus of Control

_____ 16. Sometimes I feel that I don’t have enough control over the direction my life has taken.

_____ 17. There’s not much use in trying too hard to please people; if they don’t like you, they don’t like you.

_____ 18. Many times I feel as though I have little influence over what happens to me.

_____ 19. It is hard to know whether or not a person really likes you.
20. Sometimes I can’t understand how teachers arrive at the grades they give.

Life Satisfaction

21. In most ways my life is close to my ideal.

22. The conditions of my life are excellent.

23. I am satisfied with my life.

24. So far I have gotten the important things I want in life.

25. If I could live my life over, I would change almost nothing.

Open-Ended Questions

1. Have you ever felt pressured to maintain a certain image on Facebook? If so, why? What do you do to maintain your image?

2. How do you use Facebook to amplify your best qualities? How do you use it to hide your worst qualities?

3. Are there any situations that you find inappropriate to post Facebook? Provide an Example. How did you respond to the post?