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Forging the Link: The Role of Photographs and Textual Self-Disclosure on Forming Facebook Friendships

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**Forging the Link:
The Role of Photographs and Textual Self-Disclosure
On Forming Facebook Friendships**

A thesis submitted in partial fulfillment of the requirements
for the degree of Master of Science in Experimental Psychology

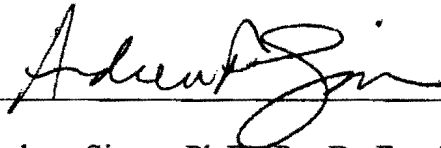
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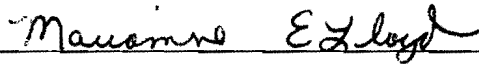
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Approval Page

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Dedication

I would like to dedicate this to my parents, James and Jolyn Specter. Like most fortunate progeny, I owe more to you than I am capable of expressing. Thank you for your love, guidance, and support, which you have shown to me every day that I've spent on this earth. A long time ago you planted within me the seed of curiosity and a passion for understanding the world around me. Thank you for everything.

I am also dedicating this to Tracy Grogan, my spouse, my partner in crime, my closest friend, and my greatest love. I wouldn't be who I am without you, and I am thankful for your existence and your presence every day.

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Abstract

Users on social networking sites (SNSs) share visual and textual content which is subsequently viewed by other users that are forming impressions in order to evaluate potential candidates for friendship. One experiment examined whether the style of photograph and amount of self-disclosure in the “about me” text of a user’s Facebook profile impact how willing viewers were to initiate friendship with the profile owner. Participants were shown one of six profiles that varied in photographic style (none, neutral expression, smiling expression) and amount of text self-disclosure (low or high). Results showed that self-disclosure promoted friendship, but photograph style had no effect. This suggests that substantive textual content can be more important than appearances when making decisions about whom to friend, even when differences in perceived attractiveness are salient.

Keywords: social networking sites, sns, facebook, visual cues, textual cues, photograph, self-disclosure, profile, friendship, visual primacy, textual primacy, visual anonymity, impression formation, person perception

Introduction

We live in an age of unprecedented global connection. The vehicle of this interconnectedness, the internet, is a key component of modern life. It allows us to communicate with people thousands of miles away, make purchases all over the world, collaborate professionally, and entertain one another and ourselves. Today, internet use has evolved to reflect the frequency of online socializing (Valkenburg & Peter, 2007). Social interaction online occurs not only with people from daily life but also users that are exclusively encountered online. Users present themselves by selectively sharing visual and textual information online. The information that individuals share is evaluated by other users, which involves the process of impression formation (Van Der Heide et al., 2012). In cases where the interaction and evaluation is between two users who have not met face to face, these perceptions have the potential to result in the formation of online friendships (Wang et al., 2010).

Social Networking Sites

In the late 90s, internet use consisted mostly of information searches and entertainment (Valkenburg & Soeters, 2001). Current use has evolved to primarily focus on interpersonal communication (Valkenburg & Peter, 2007). The driving force of this shift is social networking sites. Social networking sites (SNSs) are internet-based services designed to allow users to set up a public or semi-public profile in order to connect with a list of other users that they select, known as the friend list, and then monitor and explore content and connections shared among users within their growing network on the website (Boyd & Ellison, 2007). Such websites include big name domains such as Facebook, Twitter, Google Plus+, and many others. SNSs and the communication therein fall into the category of computer mediated communication (CMC),

as a specific form of this larger category of electronic communication. Facebook and other SNSs are the most visited website category on the internet for users age 18 to 24 (Tancer, 2008).

Facebook is the most popular SNS, and receives the most web traffic as of May 2011 (Lipsman, 2011). Facebook expanded through global implementation (Schonfeld, 2009), and is rated as the second largest website in the world (Alexa, 2012).

Contrary to expectations that information shared online is typically deceitful, studies of Facebook profiles suggest that users express relatively accurate self-descriptions instead of heavily idealized selves (Back, Stopfer, Vazire, Gaddis, Schmukle, Egloff, Gosling, 2010), and evidence suggests that the information users share online can be surprisingly accurate and sincere (Buten, 1996; Machilek, Schutz, & Marcus, 2004). Interestingly, SNSs appear to be somewhat unique in their quality of possessing relatively accurate self-representations online. Zhao, Grasmuck, and Martin (2008) conducted research that evidenced more honest and accurate shared information on Facebook than on websites in which users were anonymous such as message boards and chat rooms. Traditionally, when projected images are inconsistent with how the subject sees him or herself, they tend to do so through omission rather than lying (Leary & Kowalski, 1990). Ultimately, presentations demonstrate qualities of self-concept and both desired and undesired identity images, balancing between candid and ideal images. Impressions formed from Facebook profiles appear to be fairly accurate as well, and match the way the profile owners are described by close acquaintances, independent raters, and personality measures (Gosling, Gaddis, & Vazire, 2007). Those who are rated positively by in-person partners also receive positive ratings based on their Facebook profiles (Weisbuch, Ivcevic, & Ambady, 2009).

Research demonstrates that SNSs serve as a primary venue for adolescents' online socializing (Lenhart & Madden, 2007), that users are aware of SNS as actual social environments, and establish and support social networks via the internet (Ellison, Steinfield, & Lampe, 2007). SNS use has been linked to a number of benefits including new outlets for self-expression, as well as increased creativity, sociability and community engagement (Livingstone, 2008). To promote account holder involvement in the social network, SNSs enable users to search for members on the basis of similar interests to connect with people they do not know, or by name or school to find friends or classmates. In addition to the formation and support of friendships, SNSs give users the opportunity to coordinate and perform meetings, seek dating partners, and conduct consumer activities (Van Der Heide, D'Angelo, & Schumaker, 2012). The experimenter acknowledges that various SNSs, especially those centered on professional connections such as LinkedIn, are likely to differ fundamentally from websites that primarily target casual friendships. The current study focused on theory related to formed impressions of user presentations for the purpose of friendship formation on Facebook.

Theoretical framework

It is common for Facebook users to add individuals to their networks despite never having met them face-to-face (FtF), thus using SNSs to initiate new friendships (Wang et al., 2010). Initiating friendships is dependent upon forming impressions that are managed by the user via shared personal information, which includes content that users share on their profile. Users on Facebook form impressions of others by reviewing the visual and textual cues on a given account, such as the profile photograph and their "about me" self-description. These visual and textual cues can yield different impressions which are expected to influence raters' subsequent willingness to initiate friendship with the profile owner.

Impression Formation and Friendship on SNS

SNS use is heavily motivated by the need to belong (Nadkarni & Hoffman, 2012), and driven by a basic desire for connection (Sheldon, Abad, Hirsch, 2011). Social connection and by extension friendship are the conventional measures of this belonging, and therefore are of primary interest as a goal of SNS use. SNSs are used to support existing friendships, strengthen communication with acquaintances, and to initiate friendships with people the users do not know in their offline existence (Ellison, Steinfield, Lampe, 2007; Lenhart & Madden, 2007). Lenhart and Madden (2007) found that 47% of individuals surveyed on SNSs use them to form new friendships. An average of 15% of people's Facebook friends lists are made up of people who the profile owner have never met offline (Stefanone, Lackaff, & Rosen, 2008). Additionally, research verifies that Facebook users do develop new relationships and interact with people whom they have not met previously (Sheldon, 2008), and that this still occurs regularly (Peter, Valkenburg, & Schouten, 2005).

Whereas people rely upon appearance, facial expressions, word choice and tone of voice to form impressions in FtF interactions, on SNSs users examine visual and textual cues from personal profiles (Zwier, Araujo, Boukes, & Willemsen, 2011). Profiles contain text that frequently includes self-description and personal information, as well as photographs of the profile owner (Van Der Heide, D'Angelo, and Schumaker, 2012). The profile photograph has been confirmed to play a key role in SNS impression formation, and is regarded as the first identity marker in a profile (Zwier, Araujo, Boukes, & Willemsen, 2011). Pictures allow people to individuate themselves both quickly and effectively, whereas textual information takes longer to process and is more effortful (Wang et al., 2010). Information provided in a communication partner's face has an impact on the viewers' impression as well as well as how willing they are to

establish a relationship with the dyadic partner (Wang et al., 2010). Profile image and the attractiveness of the profile owner have been demonstrated to impact raters' willingness to initiate friendship (Wang et al., 2010). Wang and colleagues' (2010) study revealed that subjects are typically more willing to initiate friendship with opposite-sex profilers, especially when their photos were attractive. Raters were also more willing to initiate friendships with profile owners who remained visually anonymous (i.e. didn't supply a photograph) than those who supplied an unattractive one.

Alley (1988) identified how people focus primarily on others' faces when evaluating their emotions and other personal characteristics. Closely tied to this research is the importance of expressive behavior (Riggio & Friedman, 1986). Among the many visual cues that a target provides, facial expression is one of the most influential in impression formation. In their study, Riggio and Friedman (1986) found that judges formed more favorable impressions of targets who display more facial expressiveness such as smiling. It is likely that the categories of facial expressivity identified in Kramer and Winter's research (2008) mirror the effects of facial expressiveness in FtF situations (Riggio & Friedman, 1986), resulting in the formation of positive impressions online. In traditional settings, facial expressiveness is tied to positive impressions (Ekman, Friesen, O'Sullivan, Scherer, 1980) and is likely to influence receptivity to friendship. Research demonstrates that facially expressive individuals receive more positive evaluations than those who are less expressive (Riggio & Friedman, 1986).

In terms of textual cues, self-disclosure is a key factor in the development of relationships (Ma & Leung, 2005). Self-disclosure is the act of revealing personal information about oneself to another, and those who engage in self-disclosure are more liked than those who disclose less (Collins & Miller, 1994). Self-disclosure seems to be a win-win scenario, as even in situations

where professional image is at stake, teachers who engaged in self-disclosure on their Facebook profile resulted in their students viewing them as more credible (Mazer, Murphy, & Simonds, 2009), and impacted students' motivation and learning (Mazer, Murphy, & Simonds, 2007). The benefit of self-disclosure is reciprocal; self-disclosers tend to like their conversation partner more as a result of having disclosed to them (Collins & Miller, 1994).

Computer mediated communication (CMC) has been found to encourage self-disclosure (Valkenburg & Peter, 2007). This is due to the reduced public self-awareness and heightened private self-awareness that results from the private and personal environment of using a computer, and the reflective process the user undergoes when creating and posting content online (Joinson, 2001). CMC may also promote self-disclosure due to a higher sense of comfort and reduced fear about the repercussions of their sharing. Such self-disclosure promotes a shared sense of liking, caring and trust (McKenna & Bargh, 2000). Both of these features result in a stimulation of friendship in CMC.

While users typically share both images and text, it is possible for users to exclude visual cues and select solely textual personal information to be presented on their profile. While it would seem that excluding visual cues would be detrimental within the already limited cues of SNSs, choosing to remain visually anonymous in CMC has been suggested as a potential way to promote positive impressions (Wang et al., 2010). Wang and colleagues' (2010) research on responses to fictitious Facebook profiles demonstrated that visual anonymity facilitates positive evaluations, particularly in opposite-sex ratings. They suggest that users may be consciously choosing to remain anonymous in order to promote an image based primarily on their personal characteristics. This process may circumvent the acquaintance stage of interpersonal communication, which is a time where reactions and initial impressions form primarily via visual

cues (Duck, 1982). Typically time must pass before the interaction can shift out of the acquaintance stage, where formed impressions shift source from visual cues to the assessment of personal characteristics, and the exclusion of visual cues may expedite this shift (Duck, 1982).

The Primacy Debate

There is debate over whether visual or textual cues are more prominent in the formation of SNS impressions. Textual primacy is the theory that written cues such as self-descriptions are dominant when forming overall impressions, whereas visual primacy is the expectation that visual cues such as appearance, facial expressiveness, and attractiveness dominate in computer mediated communication (CMC) as they do in FtF interaction (Van Der Heide et al., 2012). Research shows mixed support, demonstrating that when visual and textual cues are presented separately that textual cues result in stronger impressions, whereas when they are presented in conjunction the cue that presents more positive or extroverted information seem to sway the overall impression (Van Der Heide et al., 2012). While it is expected that visual cues play the same dominant role in online impression formation as they do in FtF settings (Wang et al., 2010), it is possible that either visual or textual information can serve as the decision-making cue when formulating the final, overall impression (Van Der Heide et al., 2012) of online personal profiles and relationship negotiation.

Current Study

The purpose of the current study is to establish and explore the role profile characteristics play in impression formation related to the willingness of profile viewers to initiate friendship. Initiating friendship is operationalized as the act of forging a user link and collectively refers to accepting or sending a friend request, as well as engaging in social interaction methods that are

available to FB users. It should be acknowledged that there is a distinction between forming a link by a shared friend list connection and users actually becoming friends. Previous research has explored the extent to which profiles on SNSs reflect the actual characteristics of the user that created them (Kramer & Winter, 2008). Other studies explored the impressions that viewers formed as a result of reviewing both real and fictitious Facebook profiles, and found that these impressions are influenced by features on the profile page (Van Der Heide et al., 2012) and also reflect the impressions of close friends and objective raters (Gosling, Gaddis, & Vazire, 2007).

Previous studies focused on the influence of particular features and cues of SNS profiles in isolation to identify their influence on impression formation in general and perceptions of social connectedness in particular (Zwier et al., 2011). Although research has examined the role of visual and textual cues in conjunction (Van Der Heide et al., 2012), and the role of attractiveness on the initiation of friendship (Wang et al., 2010), none have explored the impact of facial expressiveness or textual self-disclosure and their impact on willingness to initiate friendship. The current study examined whether the style of photograph and amount of self-disclosure in the “about me” text of a user’s Facebook profile impact how willing viewers were to initiate friendship with the profile owner. Participants were shown one of six profiles that varied in photographic style (containing either the default place-holder image for visual anonymity, a photo of the profile owner wearing a neutral expression, or a photo with a smiling expression) and amount of textual self-disclosure (low or high).

While previous studies (Wang et al., 2010) used multiple photo models, this study used a single female model across all profile conditions which removes the confound of differences in target appearance. This allowed a clearer distinction to be made for the role of text and facial expressiveness. Willingness to initiate friendship was measured through the Willingness to

Initiate Friendship (WTIF) scale, which was developed by Wang and colleagues (2010). Additionally, participation was limited to female subjects for a number of reasons. First, the results of Wang and colleagues' study indicate that male and female participants respond to female photographs differently (Wang et al., 2010). Simplifying the design to a same-sex target/rater dynamic allows for a more controlled examination of friendship evaluation, and offers parity in order to address a long-standing bias that has resulted in an over-representation of male subjects in psychology research, and especially in single-sex studies (Grady, 1981; Cundiff, 2012).

Methods

Participants

Using the results from G* power analyses of two studies with similar rating tasks (Wang et al., 2010; Van Der Heide et al., 2012), it was determined that 120 participants would be appropriate for this research to have a power of .8. The sample consisted of 136 female respondents between 17 and 45 years of age with a mean age of 19. 97% of the sample were between the ages of 18 and 24, and 98% had a Facebook account and reported spending an average of 2 hours per day using the website. 76% of participants have, or have had, users in their friends list that they have not met in person. Most participants (66%) report that they would not send a friend request to a user they don't know in person, while slightly more than half (51%) indicate that they would accept a friend request from a user they don't know in person. Subjects also report that they are more willing to send a friend request to a user that has mutual friends (52% say yes), and 75% of subjects say that they would accept a friend request from a user with whom they share mutual friends. Participants were recruited through the online psychology research system (SONA) and received course credit for their participation.

Materials

Mock-Up Facebook Profiles. Using the FB format as a template, the experimenter created six fictitious Facebook profiles to reflect the levels of the primary independent variables including the style of profile photograph as either (a) a visually anonymous default image that Facebook uses as a placeholder when the profile owner does not provide an image, (b) a neutral photograph with the profile owner looking into the camera with low facial expressiveness similar to a photograph for an official government form of identification, and (c) a smiling photograph with the profile owner looking into the camera and displaying high levels of facial expressiveness (See Figure 1), as well as the amount of self-disclosure in the textual “about me” section consisting of (a) low self-disclosure or (b) high self-disclosure (See Figures 2 & 3). All profile images were in color, and each was standardized to feature the same female model to minimize variability in WTIF score based upon differences between models.

The categories of photo style and level of self-disclosure were selected on the basis of empirical research concerning real SNS profiles to maximize their validity (Kramer & Winter, 2008). Kramer and Winter (2008) studied actual profiles and found that users have a tendency to share text and profile photos that fall into particular categories. Text was typically either objective with short descriptions, or informal with more private information and self-disclosure. Profile images included a visually anonymous default Facebook image for a female profile owner, a simple and serious photo with neutral facial expression, a more casual picture with high levels of expression, as well as other categories (Kramer & Winter, 2008).

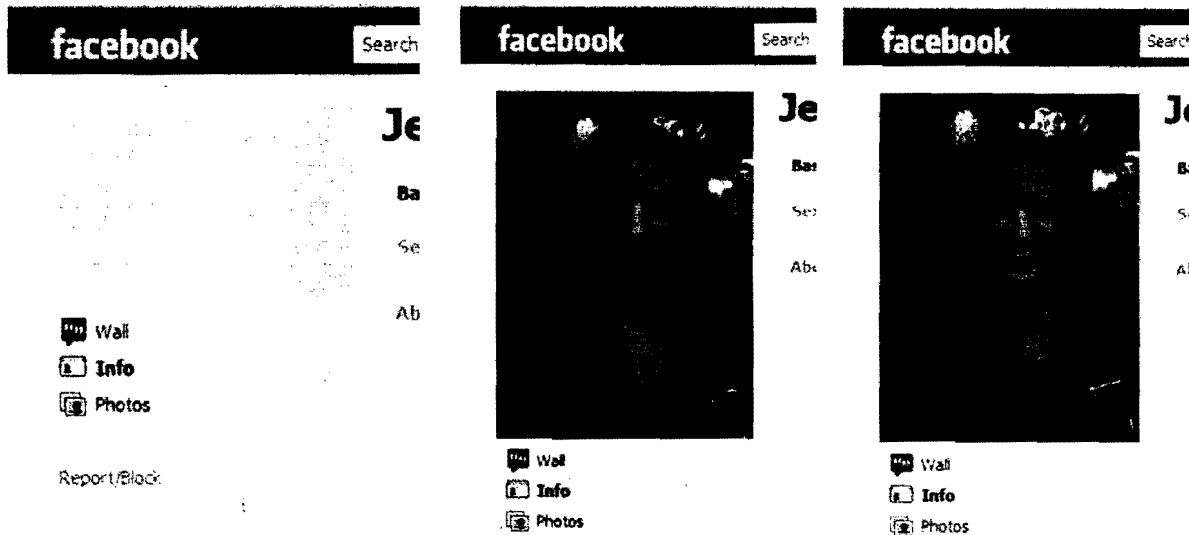


Figure 1. Facebook Profile Photos: Visually Anonymous, Neutral Expression, Smiling Expression

Jessica Williams

Basic Information

Sex Female

About Jessica I am a student with a passion for artistic forms of expression. I love to read and write, an interest that came from spending many nights reading stories with my Mom when I was younger. Listening to music and singing are a close second, and plan to go beyond singing to just a car radio some day.

Other activities that I love doing include lacrosse, eating good food, and traveling. For me, all of these things are tied together. When I would travel for lacrosse meets my parents would take me to see local sights and eating out together was very special. I want to appreciate more of what the world has to offer, and maybe even study abroad to somewhere with beautiful sights and great food.

When I'm not running around I love to spend time in my apartment playing video games, both with friends and by myself. ♥

 **Jessica only shares some information publicly.** If you know Jessica, send her a friend request.

Figure 2. Facebook Profile “About Me.” High Self-Disclosure

Jessica Williams

Basic Information

Sex: Female

About Jessica: I am a student with a passion for reading, writing, singing, music, lacrosse, travel, food, and video games. ♥

 Jessica only shares some information publicly. If you know Jessica, send her a friend request.

Figure 3. Facebook Profile “About Me:” Low Self-Disclosure

Measures

Demographics Survey. Participants answered a brief demographic questionnaire including questions related to age, gender, ethnicity, year in college, relationship status, receptivity to the formation of online friendships, and frequency SNS use.

Willingness to Initiate Friendship Scale. Participants completed the Willingness to Initiate Friendship scale to assess multiple aspects of Facebook “friending” behavior including sending a friend request, accepting a friend request, posting on the users wall, and using other site features to interact (responses range from 1 = strongly disagree to 7 = strongly agree). The measure was created and assessed for reliability and validity by Wang and colleagues (2010). The cronbach’s alpha for the measure is .82 (N = 44). The WTIF measures willingness to initiate friendship using 7-point Likert scale questions. The final WTIF score is calculated by taking the mean of the four items to estimate willingness to initiate friendship (Wang et al., 2010).

Perception of Attractiveness. This measure consisted of a single 7-point Likert-type question that asks the participant how physically attractive they think the profile owner is (1 = Very unattractive, 4 = neutral, 7 = very attractive).

Procedure

Participants were escorted to a testing area where they signed an informed consent sheet and fill out their demographic information. They were then assigned to one of the six profile conditions. Participants were told verbally that they would be viewing a user's Facebook profile, and that they would have up to five minutes to review the profile on a computer screen, during which the experimenter would leave the room. A participant's particular profile was randomly assigned. Participants then filled out paper forms of the Willingness to Initiate Friendship (WTIF) scale, followed by the perception of attractiveness measure.

Results

Table 1
Average WTIF Scores

	Visually Anonymous	Neutral Photo	Smiling Photo
High Self-Disclosure	2.33	2.24	2.44
Low Self-Disclosure	1.59	1.83	2.12

Table 2
Average Perceived Attractiveness of Profile Owner

	Visually Anonymous	Neutral Photo	Smiling Photo
High Self-Disclosure	3.22	3.59	4.0
Low Self-Disclosure	2.70	3.21	4.23

Predisposition to Online Friending. A two-way ANOVA was performed with receptivity to the formation of online friendship as a dependent variable between profile photo types (3: visually anonymous, neutral photo, and smiling photo) and amount of self-disclosure on

the profile (2: low self-disclosure and high self-disclosure). Receptivity to the formation of online friendship was assessed by summing the score of five questions from the demographics questionnaire which asked questions such as whether participants currently have online-only friends, and how they typically respond to users they don't know in-person. This analysis was conducted to explore whether there were group level differences between conditions for preconceived receptivity to online friendships. Participants reported similar receptiveness to online-only friendship across all conditions. No significant differences were found between participants who viewed different profile photo types [$F(2,136) = 0.104, p = .901, \eta_p^2 = .002$] or differing amounts of self-disclosure [$F(1,136) = 0.010, p = .920, \eta_p^2 = .000$] for predisposition toward entering online friendships. The interaction was also non-significant [$F < 1$].

Hypothesis tests. An adjustment was made to the calculation of WTIF scores. Item number 4, regarding “poking” of the profile owner, was excluded from the calculated average scores for analysis. Poking is a small interactive gesture that is available between friends on Facebook. Clicking the poke option on a user's profile sends that individual a notification that they have been poked and lists the name of the user who poked them. The poke recipient is then able to view the notification and has the option of clicking a link that will poke the sender back, thus sending a poke notification to the original sender. The item that assessed this behavior was removed because 91% of participants, regardless of the condition they experienced, gave the strongest possible disagreement (responded with 1) to this question. Some participants also remarked that this item had nothing to do with whether they would friend the profile owner. Facebook behavior has changed as the layout and features of the website are altered over the years, and poking is no longer an obviously accessible option when viewing a user's profile. In order to access it a user must enter a drop-down menu listing extra options on a user's profile

page. It is apparent that while the behavior may have been more common in 2009, when the measure was created (Wang et al., 2010), it is no longer commonplace. For these reasons, this item was excluded from calculating the average WTIF scores.

A two-way between-groups ANOVA was performed for the WTIF score as a dependent variable between profile photo types (3: visually anonymous, neutral photo, and smiling photo) and amount of self-disclosure on the profile (2: low self-disclosure and high self-disclosure). There was a main effect of amount of self-disclosure on WTIF score [$F(1,136) = 5.481, p = .021, \eta_p^2 = .040$], but photograph style had no effect [$F(2,136) = 0.828, p = .439, \eta_p^2 = .013$]. Participants who viewed profiles with high self-disclosure, regardless of photo style, were more willing to enter into an online friendship with the profile owner than those who viewed profiles with low self-disclosure. There was no significant interaction between disclosure and photo style for WTIF [$F < 1$] (See Table 1).

A two-way ANOVA was performed with participant's rating of the profile owner's physical attractiveness as a dependent variable between profile photo type and amount of self-disclosure. There was a main effect of photo style on perceived attractiveness [$F(2,136) = 8.014, p = .001, \eta_p^2 = .110$]. There was no main effect for amount of disclosure [$F(1,136) = 0.907, p = .343, \eta_p^2 = .007$]. Participants' perception of the profile owner's attractiveness was influenced by the style of image that they viewed. There was no significant interaction between photo style and self-disclosure for raters' perceived attractiveness of the profile owner [$F < 1$].

Three independent samples t-test analyses were conducted to characterize the nature of the reported differences in perceived attractiveness of the FB profile owner. Results indicate a significant difference between the mean perceived attractiveness of the smiling photo and neutral photo FB profiles [$t(88) = -2.67, p = .009, d = .37$], as well as the visually anonymous and

smiling photo FB profiles [$t(88) = -3.97, p = .000, d = .53$]. There was no significant difference in perceived attractiveness between the visually anonymous and neutral photo FB profiles [$t(90) = 1.42, p = .158, d = .20$]. Differences were such that on average the smiling photo was perceived as significantly more attractive than the neutral photo, and the smiling photo perceived as significantly more attractive than the visually anonymous image (See Table 2).

Discussion

The purpose of this study was to examine the role of FB profile content on formed impressions and willingness to enter into friendship with a given user based on variations in presented content. The results demonstrated that women are more willing to enter friendship other women who engage in more self-disclosure. This is consistent with research that suggested that self-disclosure fosters positive evaluations (Joinson, 2001), and that individuals are more willing to form relationships as a function of that self-disclosure (Collins & Miller, 1994). Contrary to prior findings (Wang et al., 2010), photo style did not influence participants' willingness to initiate friendship with the profile owner. Whether a user remained visually anonymous, supplied a neutral low-expressiveness photo, or a smiling photo, it made no difference as to how willing respondents were to initiate friendship with them. However, photo style impacted the respondents' perception of the FB profile owner's attractiveness. On average, the profile owner was rated as significantly more attractive when their photo displayed smiling rather than a neutral, serious expression or when remaining visually anonymous.

Taken into consideration together, data show support for textual primacy (Van Der Heide et al., 2012) in the initiation of friendship among women online, i.e. that it is based on textual cues rather than appearances. Studies have shown that greater attractiveness results in higher WTIF scores from both male and female raters (Wang et al., 2010). The current study measured

perceived attractiveness rather than attempting to manipulate it. While the model was the same for all photo profiles, facial expressiveness resulted in differences in perceived attractiveness. Based on previous studies, one would expect that the different photo styles would therefore alter WTIF scores (Wang et al., 2010). However, despite the fact that the profile owner was perceived as more attractive in the smiling photo condition, there was no main effect for photo style on WTIF scores. This suggests that when women are assessing other women for friendship textual cues can have a greater impact on WTIF than appearances. It was self-disclosure, and not attractiveness, that made the difference.

On average, women viewing other women's profiles are less inclined to initiate friendship (Wang et al., 2010). In Wang and colleagues' (2010) study, results demonstrated greater interest in friending those of the opposite sex. Photo style may have a different effect on men, especially given the observed difference in attractiveness ratings based on facial expressiveness. Men viewing male profiles were the least willing to initiate friendship, followed by women viewing female profiles (Wang et al., 2010). While women viewing the profile owner as more attractive doesn't impact their initiation of friendship, men may respond more favorably to the smiling profile image. Photo style may have been irrelevant because all participants were evaluating a same-sex profile owner for the purpose of friendship, which may place more emphasis on forming impressions based on the user's personal characteristics (Van Der Heide et al., 2012).

Future studies should incorporate male participants to examine how they respond to female profile owners. Additionally, male profiles should be developed with these same features and then undergo assessment by both males and females. In moving forward, consideration should also be paid to aspects of sociocultural values of attractiveness. Images that present

varying ethnicities and varying cultural beauty standards may yield differing results, and are therefore valuable factors that are worthy of investigation. Ethnically white standards of beauty influence perceptions of appearance, and have bearing on how the rater perceives both their own and others' attractiveness as a function of race (Evans & McConnell, 2003).

It should also be noted that the average willingness to initiate friendship was quite low ($M = 2.09$, $SD = 1.23$) when including all conditions. On average, most participants were not willing to initiate friendship with the profile owner. This is consistent with the results of research conducted by Wang and colleagues (2010), whose study also yielded low mean scores for WTIF ($M = 2.47$, $SD = 1.32$). This may be a result of limitations of the WTIF scale. The wording of the item assessing agreement about accepting a friend request was not clear to all participants. "If Jessica Williams sends me an invitation email, I'll friend her" should be changed to "If Jessica Williams sends me a friend request I will approve it to add her as a friend." The "poke" item was removed because it didn't contribute to an understanding of SNS friending behavior. This left only one item assessing friendship behavior outside of sending or accepting a request. New items should be considered for the measure, including assessments of whether the participant would like or comment upon the user's status updates or photos. Finally, it would be valuable to add questions relating to whether they would send or accept based on mutual friends or shared networks such as their educational institutions. Such items would allow a more thorough understanding of the qualitative boundaries of SNS friending behavior.

Modern research on SNSs faces unique challenges based on how common its use has become. While the widespread use of CMC would seem to benefit the scientific study of online behavior, it appears as though early CMC was actually more conducive to lab research. Early studies explored computer communication in theoretical usage scenarios. Now that users engage

with this technology on a daily basis, there are new challenges to maintaining ecological validity. The number of variables in modern computer socialization is so large that it is implausible to control for all factors in experiments, and yet these same real-world social variables are most certainly in play. Users are able to see the number and attractiveness of friends on prospective friend profiles, details about mutual friends, multiple personal photos, as well as status updates and wall comments by other users. There is a sophisticated level of context and social meaning to these online social behaviors, and maintaining a sense of the big picture is becoming increasingly difficult when isolating variables compared to those early theoretical CMC studies. This calls for a particularly nuanced understanding of this technology in moving forward, and for innovative experimental design that is sensitive to the complex nature of the ever-evolving user-driven utilization of these services.

Conclusions

Knowing that friending behaviors online can be based on substantive textual content rather than perceived attractiveness holds implications for ways that SNS interactions may differ from those in everyday life, which are more biased by visual cues related to appearance (Ekman, Friesen, O'Sullivan, Scherer, 1980). Visual cues appear to be less important to female viewers than textual information when making decisions about whether to friend other women, even when differences in perceived attractiveness are salient. While it is uncertain how opposite-sex pairs respond to the visual and textual information available to them, it appears that users have the power to make a difference in the quality of their social networking, and can promote their experience by supplying "about me" information rich with self-disclosure to maximize the effectiveness of their potential social connections. This strategy may also be an effective

marketing technique on SNSs. When properly harnessed, making use of self-disclosure can empower users to forge meaningful connections based on substantive content with the people around them in virtual space.

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Appendices

Appendix A: Demographics Questionnaire

Appendix B: Willingness to Initiate Friendship (WTIF) Scale

Appendix C: Perception of Attractiveness Measure

Appendix A

Code: _____

Demographics Questionnaire

Please fill in or answer each question below. Your data will remain confidential and will only be identified by your individual participant code.

1. Age: _____
2. Gender (circle one) :
Male Female Other/Prefer Not To Answer
3. Race (circle one) :
Caucasian
African American
American Indian or Alaska Native
Asian, Hispanic, Latino, or Spanish
Other (Please indicate _____)
4. Year at Seton Hall (circle one) : Freshman Sophomore Junior Senior
5. Current relationship status (circle one) : Single In a relationship Married
6. On average, how many hours per day do you use the following social networking websites? (please check one box for each website) :

	No Account	0 - 1	1 - 2	2 - 3	3 - 4	4 - 5	6 or more
Facebook							
Twitter							
Google+							
LinkedIn							
MySpace							

7. Do you have friends on Facebook that you have not met in person, or who you had not met at the time you became Facebook friends?

Yes No
8. Would you send a friend request to a Facebook user that you have not met in person?

Yes No

CODE _____

9. Would you accept a friend request from a Facebook user that you have not met in person?
Yes No

10. Would you send a friend request to a Facebook user that you have not met in person that has mutual friends?

Yes No

11. Would you accept a friend request from a Facebook user that you have not met in person that has mutual friends?

Yes No

Appendix B

CODE _____

**Wang, Moon, Kwon, Evans, & Stefanone's (2010)
Willingness to Initiate Friendship on Facebook (WTIF) Scale**

After checking out Jessica Williams's profile, score your agreement with the following statements by circling the number that corresponds with your response.

(1 = Strongly disagree, 2 = Moderately disagree, 3 = Slightly disagree, 4 = Neutral, 5 = Slightly agree, 6 = Moderately agree, 7 = Strongly agree)

I'll add Jessica Williams as my Facebook friend.

Strongly disagree 1 2 3 4 5 6 7 Strongly Agree

If Jessica Williams sends me an invitation email, I'll friend her.

Strongly disagree 1 2 3 4 5 6 7 Strongly Agree

I will 'poke' Jessica Williams.

Strongly disagree 1 2 3 4 5 6 7 Strongly Agree

I will write on Jessica Williams's wall.

Strongly disagree 1 2 3 4 5 6 7 Strongly Agree

Appendix C

CODE _____

Rating of Physical Attractiveness

How physically attractive do you think Jessica Williams is?

Very unattractive 1 2 3 4 5 6 7 Very attractive