

Please “Friend” Me: Comparing Positivity of Impressions across Introduction Platforms

Douglas E. Colman & Leslie D. Cramblet Alvarez
Adams State University

As technology advances, social processes that have traditionally occurred face-to-face (Ftf), are taking place in an electronic environment. First impressions when interviewing for a job or finding a significant other are now commonly made via Skype, Facebook, or other electronic applications. Although zero-acquaintance literature is vast, few studies have investigated impression formation via video-mediated communication (VMC) or social networking sites (SNS). Furthermore, little is known about the effects of perceiver intent on these impressions. Two studies evaluated impression positivity among Ftf, VMC, and SNS, and between 2 perceiver intents. In both studies Ftf and VMC introductions did not differ significantly. Furthermore, Study 2 indicated that both Ftf and VMC introductions produced significantly more positive impressions than SNS regardless of perceiver intent. However, once age and SNS usage were controlled, this significant difference did not hold. These findings have practical implications across an array of situations.

Impression formation is an important human process, it contributes to many important outcomes (Cronbach, 1955), and is consequential for both the judge (person making the judgment) and target (the person who is being judged; Funder, 2012). Zero-acquaintance impressions, a condition in which judge and target have never previously interacted with one another (Albright, Kenny, & Malloy, 1988), create the reference upon which future interactions are founded, and begin automatically at first sight and/or communication with a target. As Asch (1946) explained, every observation or interaction after the zero-acquaintance impression will only “enrich or upset our first view” (p. 258). The process by which one develops those perceptions is explicated by Funder (1995). In his Realistic Accuracy Model, there are four stages to accurate impression formation: relevance, availability, detection, and utilization. Specifically, target information has to be relevant and available, and then a judge has to detect and correctly utilize that information. Because accurate impressions are generated through this process, many variables can be impactful. For example, variables such as time of the interaction (Bar, Neta, & Linz, 2006; Willis & Todorov, 2006), physical features of

Author info: Correspondence should be sent to: Douglas E. Colman, Idaho State University, Department of Psychology, 921 S. 8th Ave, Stop 8112, Pocatello, ID 83209. E-mail: colmande@gmail.com

North American Journal of Psychology, 2015, Vol. 17, No. 3, 465-484.

© NAJP

the target (Masip, Garrido, & Herrero, 2004), intentions of the judge (Chartrand & Bargh, 1996; McCulloch, Ferguson, Kawada, & Bargh, 2008), and significant others' perceptions of the target (Buchert, Laws, Apperson, & Bregman, 2008; Pontari & Schlenker, 2004; Schlenker, Lifka, & Wowra, 2004) have been found to play an integral role in the formation of impressions.

Traditionally, the process of impression formation has occurred in a face-to-face (Ftf) environment. However, electronic communication, both synchronous (e.g., Skype) and asynchronous (e.g., e-mail), has expanded the contexts within which people form impressions. Given these expanded environments, research was redirected to determine whether differences existed between the traditional setting of Ftf and emerging modes of introduction (MOI). Historically, the progression of research within this paradigm has been to first establish whether global differences exist between MOI (e.g., Ftf vs. computer-mediated settings; Liu, Ginther, & Zelhart, 2002; Walther, 1992). After establishing that differences indeed exist, research then redirects to identifying the processes affecting impressions within those channels (Fullwood, 2007; Lim, Benbasat, & Ward, 2000; Vonk, 1999). This progression, once again, became relevant with the advent of social networking sites (SNS).

Impression Formation With Technology

Computer-mediated communication (CMC). People use technology, especially computers and the Internet, for wide-ranging activities including work, banking, shopping, and, most central to this article, communication. Specifically, the increasing reliance on technology has opened new avenues for communication to occur through the use of tools such as instant messengers, e-mail, and chat rooms. This use of technology to communicate has been termed CMC.

Social Information Processing Theory, one of the foremost theories of CMC impression development (Walther, 1992), posits that many of the immediate shortcomings of the CMC impression formation landscape (e.g., lack of nonverbal cues) are overcome by an increased time allotment for the development of impressions. However, the hyperpersonal model of impression development (Walther, 1996) suggests that CMC can actually facilitate impression development to levels exceeding those in Ftf environments. The premise of these theories is that the CMC environment is different than other MOI, and as such, impression formation occurs in a fundamentally different procedural manner. Even so, with the proliferation of CMC, individuals are adapting to effectively and efficiently generate impressions.

Video-mediated communication (VMC). Branching from CMC is VMC, a mode of communication using synchronous live video feeds

(e.g., Skype) which has been used in a variety of interpersonal situations (e.g., conferences, interviews; Craiger & Weiss, 1998). In fact, preliminary job interviews via VMC have become common. However, many job seekers approach this prospect with trepidation. Some of these concerns have been validated both by popular acceptance and empirical support. For example, Fullwood (2007) compared Ftf and video-mediated interactions between pairs of participants who had not been previously introduced. Findings indicated that participants in the Ftf condition judged their partner as more likable and intelligent. It was concluded that certain subtleties of nonverbal communication are lost in video-mediated settings, resulting in poorer impressions.

Moreover, growth in video interviewing has resulted in numerous popular press articles focused on making the best first impression in that medium. Common themes include taking care to ensure proper lighting, background, eye contact, and avoiding technical difficulties, which are features unique to a synchronous video feed setting (Caukin, 2013; Levin-Epstein, 2011; Swanson, 2013; Whittaker, 2013). Although it is wise to implement these tactics, they likely do not circumvent the issues with VMC impressions as compared to Ftf suggested by Fullwood (2007).

Social networking sites (SNS). Also stemming from the technological boom are SNS, which have become a staple in society, with the leading SNS enabling upwards of a billion monthly active users to connect (Facebook, 2013). SNS allow users to communicate in synchronous and asynchronous text-based forms, and include options for linking and/or posting videos to one’s profile. These platforms, such as Facebook, are a relevant method of communication and have been shown to increase social support of users (Asbury & Hall, 2013; Gosling, Gaddis, & Vazire, 2007; Kim & Lee, 2011). Ultimately, SNS provide an environment that allows individuals to rekindle past, nurture present, and cultivate future relationships (Kujath, 2011).

In fact, Yang and Brown (2013) suggested that social networking use has two key motives: (a) maintaining existing relationships and (b) pursuing new relationships. The emergence and popularity of online dating websites provide real-world evidence that people are now meeting others using the Internet with the intention of forming a relationship. Thus, given that the boundary between online and offline activities has been blurred, it is expected that impression formation processes will evolve to incorporate this MOI, much like they have for CMC.

Findings across MOI

A large literature has been amassed with research stemming from the comparison of various MOI. For instance, it has been found that the

manner in which one presents one's self in CMC, specifically through the use of chat rooms, is relatively the same as Ftf (Bargh, McKenna, & Fitzsimons, 2002). Alternatively, SNS allow for easy and rapid access to information that is not normally revealed in a traditional first-impression setting (i.e., Ftf). Specifically, SNS have sections to display information about oneself such as location, relationship status, age, political affiliation, and interests. Upon meeting someone in person for the first time, this information may not be as readily apparent. Such features appear in line with the hyperpersonal model (Walther, 1996), which suggests that CMC can facilitate the impression formation process. Although greater individuated information is available, Green, Evans, and Gosling (2008) proposed that people continue to present their real selves on SNS. It seems then, that people are using the additional features of SNS to create realistic, virtual depictions of themselves even though the opportunity to create false representations is available (Haferkamp & Krämer, 2010). More importantly, Anderson, Fagan, Woodnutt, and Chamorro-Premuzic (2012) suggested that the Facebook platform allows its users to make rapid and accurate assessments of potential friends utilizing relatively small amounts of information.

Intentions Toward a Target

As one anticipates meeting a target for the first time, it is not unusual to have expectations and goals for the impending interaction. Research has shown that impressions of a target are readily altered because of judge intentions (Chartrand & Bargh, 1996; McCulloch et al., 2008). Intentions are the purposes or goals that one has for interacting with a target, which can impact the communication and/or relationship a judge develops with a target. To this end, Pontari and Schlenker (2004) argued that people have the ability to manage their perceptions as demonstrated by the mediating influence of intentions. Considering that intentions are salient in many situations, judges seek out and use a wide array of information. For instance, many employers view prospective employees' social networking profiles before making decisions on job offers (Skinner, 2008). Additionally, research has indicated that employers may glean valuable personality information about applicants by reviewing their social networking profiles (Kluemper, Rosen, & Mossholder, 2012). Furthermore, social network interactions with previously unacquainted peers and/or supervisors in the workplace are becoming more common and can have grave implications, such as advancement opportunities and organizational consequences (Jiang, Hughes, & Pulice-Farrow, 2014). This is a major paradigm shift from the initial intent of SNS, and thus research is warranted on the effects of perceiver intent.

Given the importance of first impressions outlined above, the subsequent two studies used a zero-acquaintance paradigm. These studies were designed with the following purposes in mind: (a) to evaluate positivity of impressions between Ftf and VMC introductions in a group environment and (b) to evaluate the positivity of impressions across three MOI (Ftf, VMC, and SNS) in settings deemed more ecologically valid (Ftf in a group environment; VMC and SNS via the Internet) while being prompted to one of two perceiver intents (target as a potential friend or employee).

STUDY 1

Study 1 examined the effect introduction method has on positivity of first impressions utilizing an independent-samples experimental design. This design is distinct from the procedure of Fullwood (2007), as we used a composite score as a measure for impression positivity. Although impression positivity had previously been found to be less positive in using VMC as compared to Ftf (Fullwood, 2007), we approached the current study in an exploratory manner and thus had no specific predictions.

Method

Recruitment of Participants. The 88 participants (58 women; $M_{\text{age}} = 20.83$, $SD_{\text{age}} = 5.59$) were students attending a small university in the western part of the US. Ethnicity was self-reported as 54.9% Caucasian, 8% African American, 29.5% Hispanic, 2.3% Asian, and 5.5% other/unidentified. Participants were recruited from intact classrooms for both the Ftf and VMC conditions. Remuneration was provided through extra course credit at each instructor's discretion.

Stimuli. An introduction script (see Appendix A) was developed for the confederate from actual life events and information. However, a fictional name was utilized. The confederate memorized the script in an effort to keep the introductions consistent in content and length. The Ftf stimuli consisted solely of the in-person introduction, and the VMC condition used a video that was filmed during one of the Ftf introductions.¹ It should be noted that the stimuli were not truly synchronous because participants were not provided an opportunity to interact with the confederate in Ftf interactions or via VMC. Rather, we approximated a synchronous environment with introductions, which is the first step in synchronous communication at zero-acquaintance.

Measure. A counter-balanced impression survey was created for the present study by the authors. This survey was designed to quantify impressions by generating a positivity score (sum of all items). This measure included eight items (Attractiveness, Friendliness, Intelligence, Enough Information, Accurate Information, Honesty, Strength, and

Trustworthiness), and were rated on a 10-point Likert-type scale, which provided an effective range of 8 to 80 (higher scores were more positive). Internal consistency was adequate for this measure ($\alpha = .76$).

Procedure. Ftf. The researcher entered intact classrooms and, after obtaining consent, announced that another person would introduce herself. Directly following, the confederate entered, recited the memorized script, and then exited the room. Participants then completed the measure individually and were subsequently debriefed.

VMC. Similar to the Ftf procedure, the researcher entered intact classrooms and, after obtaining consent, played the video introduction. Directly following the completion of the video, participants completed the measure and were then debriefed.

Results and Discussion

An independent-samples *t*-test was conducted to evaluate the overall positivity between the Ftf and VMC conditions. No difference was found between these two groups (Ftf: $M = 54.57$, $SD = 10.58$; VMC: $M = 56.45$, $SD = 9.45$), $t(86) = 0.882$, $p = 0.38$, $d = .19$. This finding did not support the notion that the positivity of impressions formed via VMC differ greatly from an Ftf environment. In fact, this finding supports the notion that VMC approximates an Ftf environment. However, this null result was limited because both stimulus conditions were collected within a classroom environment. Even so, it expanded upon the dearth of literature on positivity of impressions made through VMC and Ftf introductions. More centrally, it provided direction on which to move forward with Study 2.

STUDY 2

Although no difference was found between Ftf and VMC introductions in Study 1, we retained both VMC and Ftf conditions for Study 2 to provide a degree of replication. We did this as a means of evaluating the ecological validity of that finding. Purposely, we wanted to discover if the environment in which the introductions were made would alter the null finding in Study 1 on the positivity of VMC and Ftf introductions. More importantly, we added two additional variables to this study. Specifically, we expanded the investigation of MOI to include a SNS and probed the role of perceiver intent.

Although there have been an increasing number of studies on SNS regarding the differences in impressions due to features within these sites (Back et al., 2010; Tong, Van Der Heide, Langwell, & Walther, 2008; Walther, Van Der Heide, Kim, Westerman, & Tong, 2008), a general understanding of the effect this channel of communication has on the overall positivity of first impressions has yet to be gleaned. Furthermore,

intentions have been shown to affect the process of impression formation in Ftf interactions (Chartrand & Bargh, 1996; McCulloch et al., 2008), yet perceiver intent has not been of experimental interest using SNS thus far. As such, Study 2 examined the effect introduction method and perceiver intent had on overall positivity of first impressions utilizing a 3 (Ftf, VMC, SNS) x 2 (friend, employee) experimental design.

Method

Participants. The 279 participants were students attending a small

TABLE 1 Demographics and Social Networking Usage of Participants in the SNS Condition in Study 2

Item	n	%
Sample size	95	34.1
Ethnicity		
White, non-Hispanic	63	66.3
Hispanic	18	18.9
Black, non-Hispanic	1	1.1
Native American/Alaska Native	2	2.1
Asian/Pacific Islander	1	1.1
Other	7	7.4
withheld	3	3.2
Gender		
Men	31	32.6
Women	62	65.3
Missing	2	2.1
Amount of sample using ¹		
Facebook	85	89.5
Other SNS	48	51.5
	<i>M</i>	<i>SD</i>
SNS usage		
Time spent on Facebook ²	10.10	17.98
Time spent on other SNS ²	5.18	31.37
Total time spent on SNS ²	10.68	45.51
Friends on Facebook	219.79	204.78
Friends on other SNS	155.45	182.72
Age	25.76	10.49

Note 1 Participants often maintain multiple social networking accounts, thus the sum of the two figures may be > n and > 100%.

Note 2 Time reported in hours per week.

western university (see Tables 1, 2, & 3 for group sizes and demographics). Participants were recruited from intact classrooms for the Ftf condition, and participants in the VMC and SNS conditions were recruited via campus-wide e-mail. The e-mail led the participants to an online survey tool (PsychData), which they used to complete the

introduction and survey at their own pace. Online remuneration was provided in the form of an entry to a drawing for gift cards to local merchants and in-class participants were remunerated with extra course credit at each instructor's discretion.

TABLE 2 Demographics and Social Networking Usage of Participants in the VMC Condition in Study 2

Item	n	%
Sample size	104	37.3
Ethnicity		
White, non-Hispanic	61	58.7
Hispanic	24	23.1
Black, non-Hispanic	3	2.9
Native American/Alaska Native	1	1.0
Asian/Pacific Islander	1	1.0
Other	9	8.7
Withheld	5	4.8
Gender		
Men	29	27.9
Women	71	68.3
Missing	4	3.8
Amount of sample using ¹		
Facebook	85	81.7
Other SNS	44	42.3
	<i>M</i>	<i>SD</i>
SNS usage		
Time spent on Facebook ²	9.24	9.62
Time spent on other SNS ²	3.56	6.10
Total time spent on SNS ²	15.59	13.98
Friends on Facebook	237.85	263.51
Friends on other SNS	159.24	252.10
Age	26.27	10.61

Note 1 Participants often maintain multiple social networking accounts, thus the sum of the two figures may be > n and > 100%.

Note 2 Time reported in hours per week.

Materials. SNS. The personal Facebook profile of a confederate was adapted for use within the current investigation.² Names and other identifiable information were changed for confidentiality. Findings by Walther, Van Der Heide, Hamel, and Shulman (2009) regarding owner- and friend-generated wall posts were addressed to create a neutral introverted/extroverted profile. This was accomplished by using posts by both the confederate and friends of the confederate. The confederate profile was altered to display 307 friends because this approximated the "optimal" number of friends as outlined by Tong et al. (2008).³

TABLE 3 Demographics & Social Networking Usage of Participants in the Ftf Condition in Study 2

Item	<i>n</i>	%
Sample size	80	28.7
Ethnicity		
White, non-Hispanic	40	50.00
Hispanic	29	36.3
Black, non-Hispanic	3	3.8
Native American/Alaska Native	1	1.3
Asian/Pacific Islander	2	2.5
Other	4	5.0
Withheld	1	1.3
Gender		
Men	27	33.8
Women	52	65.0
Missing	1	1.2
Amount of sample using ¹		
Facebook	64	80.0
Other SNS	47	58.8
	<i>M</i>	<i>SD</i>
SNS usage		
Time spent on Facebook ²	6.01	8.41
Time spent on other SNS ²	3.06	6.27
Total time spent on SNS ²	10.38	14.76
Friends on Facebook	244.41	193.37
Friends on other SNS	245.61	383.52
Age	22.10	7.07

Note 1 Participants often maintain multiple social networking accounts, thus the sum of the two figures may be > *n* and > 100%.

Note 2 Time reported in hours per week.

Ftf. The Ftf condition incorporated most of the owner-generated information that was available on the Facebook profile. The same introduction script that was utilized in Study 1 was used for this study, again in an effort to keep all introductions consistent in content and length. See Appendix A for the script and Table 4 for an outline of the information available in each condition.

VMC. A video was created for the VMC condition, using a professional visual and audio studio, of the confederate giving the same introduction as in the Ftf condition. The confederate wore the same clothing, accessories, and hairstyle in all three conditions.

TABLE 4 Speech Script and Comparison of Information Presented within Study 2 Stimulus Conditions

Information stated in Ftf and VMC:	Information provided on Social Networking (SNS) Profile
Past location	None stated
Current location	Info page: Parker, Colorado
Family	None stated
Education	Info page: Community college to be a physical therapist assistant
Occupation	Info page: Nanny for 5 years
Interest	Info page: Sports, including Broncos, Nuggets, Avalanche, and Rockies. Wall posting: "...is at the Avalanche game and lovin it!", and "...is so excited! Just got a hockey stick and puck signed!"
Hobbies	Info page: Tennis, guitar, piano, watching ESPN Wall posting: "We should to hang out sometime", and "We'll have to go shopping"
Religion	Info page: Christianity
Perceptions of self	Info page: Chill laid back person, Never be too nice
Perceptions of others	Info page: My friends say I'm a complete pushover

Note 1 Participants were placed in one of three stimulus conditions: meeting a person for the first time via video (VMC), in person (Ftf), or via Facebook profile and information page (SNS).

Note 2 Information available within the Social Networking (SNS) Profile (e.g. number of friends, group membership, etc.) not listed on the left hand column was not provided in the Ftf or VMC stimulus conditions.

Measure. The measure was adapted from Walther's impression development instrument (1993) as a method to quantify overall impression positivity. The original instrument hosted 14 items. We added three more items—Attractive, Trustworthy, and Physically Strong—to alter the measure for the present study. To prompt perceiver intent, the impression formation instructions were changed to read: "When considering this person for a _____ ("friend" or "employee") how would you rate him or her on these qualities?" Following the impression measure, participants responded to questions regarding SNS usage (see Tables 1, 2, & 3 for usage details).

To quantify overall positivity of impressions, 10 items assessing positive attributes (Honest, Intelligent, Active, Sociable, Interesting, Friendly, Easy Going, Attractive, Trustworthy, and Physically Strong) were tabulated to create a positivity score. Internal consistency was

adequate to high for this 10-item subset ($\alpha = .84$). Reviewing the normality of this positivity score, we found a moderate negative skew ($z_{\text{skew}} = -7.60$). We thus performed a reflected square root transformation, which provided a distribution approximating normality ($z_{\text{skew}} = 2.46$). All analyses in Study 2 are therefore discussed in terms of the reflected square root transformed positivity score. Additionally, because we examined first impressions, all participants who answered “yes” to the question “Have you ever seen or met this person before?” were subsequently removed prior to data analysis.

Procedure. Ftf. The researcher entered in-tact classrooms and, after obtaining consent, announced that a person would be entering to introduce herself. Directly following, the confederate entered, introduced herself by reciting the memorized script, and then exited the room. Participants then completed the impression formation measure individually. Perceiver intent (friend or employee) was prompted on the measure using alternating instructions. Following the completion of the questionnaire packets, each class was debriefed as a whole.

VMC and SNS. Because participants were recruited from a campus-wide e-mail, they were allowed to access the material at their own leisure. The MOI (VMC or SNS) and perceiver intent (friend vs. employee) were randomly assigned through the online survey tool. VMC participants viewed the video introduction, and SNS participants viewed the confederate’s adapted Facebook pages until they were prepared to move forward. After viewing the assigned stimulus, participants were randomly assigned perceiver intent and subsequently directed to the measure, after which a debriefing page was presented.

Results and Discussion

Positivity of impressions. A 3 (MOI) \times 2 (Prompt) between subjects factorial ANOVA enabled an understanding of impression positivity. A significant main effect was found among MOI, $F(2, 273) = 6.713$, $p = .001$, $\eta_p^2 = .047$. However, the main effect for prompt and the interaction between factors was not significant (see Table 5). These results demonstrated that MOI affected the positivity of impressions irrespective of perceiver intent.

Similar to Study 1, Tukey post-hoc indicated no significant difference in positivity existed between Ftf and VMC conditions ($M_{\text{diff}} = 0.089$, $p = .842$). More importantly though, both Ftf ($M = 3.303$, 95% CI [3.067, 3.538]) and VMC ($M = 3.39$, 95% CI [3.183, 3.597]) conditions resulted in significantly more positive impressions than the SNS condition ($M = 3.843$, 95% CI [3.626, 3.538]) at the $p < .01$ level.⁴ As would be expected, these findings revealed that both forms of communication

containing nonverbal cues (Ftf and VMC) yielded more positive impressions.

TABLE 5 Group Means and Standard Deviations of Impression Ratings by Condition and Prompt

Stimulus Condition	Friend			Employee		
	M	SD	<i>n</i>	M	SD	<i>n</i>
SNS	3.96	1.41	44	3.72	1.14	51
VMC	3.40	0.87	48	3.38	0.85	56
Ftf	3.37	1.12	39	3.23	0.99	41

Note 1 A between subjects factorial ANOVA was utilized for this analysis.

Note 2 Participants were placed in one of three stimulus conditions: meeting a person for the first time via video (VMC), in person (Ftf), or via Facebook profile and information page (SNS). Further, they were prompted to think of the confederate as either a potential friend or potential employee.

Age and SNS usage on positivity. Because communication technologies, SNS in particular, are increasingly used, it is important to account for other variables influencing impression positivity. Age is of particular interest because it is commonly believed that there are generational differences in the use of, and familiarity with, SNS. It is also suspected that one who is familiar and spends more time interacting with the various elements of SNS is apt to form impressions differently than one who is unfamiliar. As such, the time one spends using SNS is also of interest. Following this logic, we conducted exploratory analyses.

To determine whether a relationship existed between age and usage of SNS, a Pearson correlation was computed. The relationship between age ($M = 24.90$, $SD = 9.81$) and usage of SNS ($M = 14.29$, $SD = 18.99$) was not significant, $r(111) = -.054$, $p = .567$, indicating that the popular belief that usage of SNS decreases with age is not supported in this sample. Because these two variables were not significantly related, but are each thought to potentially impact the impression one makes using SNS, we conducted a one-way ANCOVA to determine the effect MOI has on overall positivity while controlling for both age and SNS usage. The addition of these covariates resulted in a non-significant main effect of MOI, $F(2, 108) = 2.344$, $p = .101$, $\eta_p^2 = .042$. SNS usage emerged as a significant covariate, $F(1, 108) = 4.592$, $p = .034$, $\eta_p^2 = .041$, while age did not reach statistical significance, $F(1, 108) = 2.939$, $p = .089$, $\eta_p^2 = .026$. Further, when only SNS usage was entered as a covariate in the model, the main effect of MOI did not hold, $F(2, 110) = 2.357$, $p = .10$, $\eta_p^2 = .041$, as SNS usage was a significant covariate, $F(1, 110) = 3.914$, $p = .05$, $\eta_p^2 = .034$. These results provided support for the notion that SNS

usage, but not age, has a role in the positivity of impressions formed among MOI. Still, given the restricted variability in the age for this sample, the fact that age was not a significant covariate should be interpreted and used with caution.

GENERAL DISCUSSION

Research on impression formation is abundant. For instance, there is a great deal of literature on the accuracy of zero-acquaintance impressions (see Funder, 2012, for a review). However, there is a dearth of research comparing positivity of impressions, particularly across MOI at zero-acquaintance. To assess possible differences, previous research regarding variables that affect impression formation within CMC, VMC, and SNS settings were taken into consideration. Furthermore, because well-defined impressions are generally formed within the first few minutes of meeting a person (Bar et al., 2006; Willis & Todorov, 2006), the stimulus conditions were designed to be presented in less than 5 min in every condition in both studies. Although past research has demonstrated that VMC yields less positive first impressions than Ftf encounters (Fullwood, 2007), the current studies did not support this claim. Importantly, Study 2 extended such research into the realm of social networking, providing evidence that both Ftf and VMC yield significantly more positive impressions than those formed via SNS. Moreover, some support was demonstrated for the notion that familiarity with technology impacts individuals' impressions among MOI in that perceivers' SNS usage, but not age, accounted for differences in impression positivity.

Practical Applications

Given the current global environment where interviews, courtroom testimony, and business conferences utilize Skype and other VMC applications, it is reassuring that zero-acquaintance introductions, the foundation on which future interactions will be originated (Asch, 1946), are similar to that of Ftf introductions. Although these findings are encouraging, Study 2 provides interesting insight regarding impression formation in the SNS setting, which is especially relevant as SNS are moving from a strictly social function to use in professional settings.

Employers are using SNS such as Facebook and LinkedIn to screen candidates, with 35% of them eliminating candidates due to online content (Lorenz, 2009). Recent literature has suggested that information about one's personality may be conveyed through SNS profiles, allowing employers access to valuable applicant data during the hiring process (Kluemper et al., 2012). Given the results of the current investigation, employers' prior usage of, and familiarity with, the social media being

implemented in the selection process is important. That is, when an employer first begins using social media in the process of screening candidates, the positivity of impressions are likely lower than they would be in Ftf and VMC environments. However, once review of applicant SNS becomes a standard element in the selection process, the positivity of impressions made across these three MOI will likely be leveled.

Aside from the implications to the professional world, the findings also have implications on the individual level. Currently, there is little doubt as to the importance of understanding the impression one is emitting, especially given the integration of SNS into workforce decision-making and the overall use of SNS in day-to-day interactions. As such, one should proceed with added caution when using social media. Because the present research indicated that impressions made through SNS are less positive regardless of perceiver intent, one could solicit judgments from an unacquainted peer before important future judgment situations occur (e.g., job interview). Even though such a strategy could be useful, we caution against the reliance on a singular tactic for comprehending the impression one is providing on SNS and through other modalities.

Overall, while exploratory in nature, the finding that SNS usage has a role in the positivity of impressions formed among MOI is important. This is especially true when one considers the finding that without regard to this covariate, SNS produced significantly less positive impressions. Therefore, those lacking familiarity with such online environments should exercise caution when evaluating others, particularly with consequential outcomes on the line (e.g., hiring decisions, jury selection), to avoid a negatively biased first impression. Before much else can be said about this, however, research delving into this result needs to be conducted.

Limitations

Although the current investigations contribute to the knowledge of impression formation in general and, more specifically, impressions created in video-mediated and social networking environments, it is important to note some limitations. Most importantly, the representation of Facebook in Study 2 was problematic in a research setting. First, our design controlled some of the information presented among each condition. Although the intention was to maintain consistency among stimuli, the ease of high self-disclosure in SNS made this challenging. Information readily available in SNS settings such as personal history, interests, and number of friends is not typically available when making a first impression in Ftf and VMC settings (Gonzales & Hancock, 2008). The inclusion of information in the SNS stimulus that was not available

in other conditions enhances the ecological validity of this condition but detracts from consistency across MOI. Thus, inconsistency among information provided due to SNS features was a limitation.

Secondly, in a natural environment, people who use Facebook interact with a dynamic system. The design utilized in Study 2 was static and did not allow participants to navigate the site, which is cause for concern. If one uses a dynamic interface to compare and contrast information, the argument can be made that a perceiver has more information to develop accurate impressions. On a related matter, the environments in which Studies 1 and 2 displayed the stimuli were dissimilar. Study 1 provided both stimuli within a group classroom setting, whereas Study 2 provided the Ftf stimuli in a group classroom setting, yet allowed VMC and SNS participants to view the stimulus independently. As such, the results of Study 2 do not provide a clear replication of Study 1. However, we assert that obtaining similar results despite this inequality enhanced the validity of these findings, and are therefore a valuable contribution to the literature on zero-acquaintance impressions among MOI.

Another limitation within these investigations was that the current design only used one confederate. The gender of the confederate might not only have affected the results of the prompt in Study 2, it might have affected overall positivity in both studies. Because only a female confederate was available, gender bias may have influenced the results. Wang, Moon, Kwon, Evans, and Stefanone (2010) discovered that men are more likely to prefer to associate with a female regardless of other factors, and women prefer to associate with both genders equally. This suggests that the ratings of the female confederate might have been inflated. Additionally, the confederate selected for the present study may possess attributes that are inherently viewed as more positive in Ftf and VMC introductions. Theoretically speaking, other confederates could have a different pattern of perceived positivity across MOI. Therefore, employing multiple confederates, both male and female, is recommended for future investigations.

Finally, two limitations existed to the finding that perceiver intent did not significantly affect positivity of impressions. The first of these concerned the sampling population. Most participants within Study 2 were traditionally aged college students and have likely not been in the position of hiring employees. As such, conclusions on perceiver intent can only be generalized to the younger segments of the population. The second limitation was methodological. As outlined in the procedure, participants met the confederate and were then asked to rate her as either a potential "friend" or potential "employee." However, during real world introductions, perceiver intent is often implicit and is set prior to

introductions. Thus, it is arguable that had participants been prompted prior to introduction, differences might have emerged. Consequently, more research should be conducted on this element to understand potential effects.

Conclusion

In spite of these limitations, the present studies provided valuable insight into impression positivity across MOI and paved a foundation for future research to build upon. Additionally, the effect of perceiver intent enters the literature in regard to zero-acquaintance impressions among MOI, inclusive of SNS. Although prompted perceiver intent did not yield a significant result, it is important to examine this variable in future investigations. Also, the exploratory analyses provided interesting results in that after statistically controlling for SNS usage, significant differences in impression positivity among MOI did not hold. Even so, research needs to be conducted to further explicate the role of SNS usage and age as contextual variables. Overall, Studies 1 and 2 provided interesting insight on the role MOI plays in the formation of impressions, particularly positivity. In conclusion, future research should consider mechanisms through which zero-acquaintance impression on positivity can be attenuated using video-mediated and social networking environments.

REFERENCES

- Albright, L., Kenny, D. A., & Malloy, T. E. (1988). Consensus in personality judgments at zero acquaintance. *Journal of Personality and Social Psychology, 55*(3), 387-395.
- Anderson, B., Fagan, P., Woodnutt, T., & Chamorro-Premuzic, T. (2012). Facebook psychology: Popular questions answered by research. *Psychology of Popular Media Culture, 1*(1), 23. doi: 10.1037/a0026452
- Asbury, T., & Hall, S. (2013). Facebook as a mechanism for social support and mental health wellness. *Psi Chi Journal of Psychological Research, 18*(3), 124-129.
- Asch, S. E. (1946). Forming impressions of personality. *The Journal of Abnormal and Social Psychology, 41*(3), 258-290. doi: 10.1037/h0055756
- Back, M. D., Stopfer, J. M., Vazire, S., Gaddis, S., Schmukle, S. C., Egloff, B., & Gosling, S. D. (2010). Facebook profiles reflect actual personality, not self-idealization. *Psychological Science, 21*(3), 372-374. doi: 10.1177/0956797609360756
- Bar, M., Neta, M., & Linz, H. (2006). Very first impressions. *Emotion, 6*(2), 269-278. doi: 10.1037/1528-3542.6.2.269
- Bargh, J. A., McKenna, K. Y. A., & Fitzsimons, G. M. (2002). Can you see the real me? Activation and expression of the "true self" on the Internet. *Journal of social issues, 58*(1), 33-48.

- Buchert, S., Laws, E. L., Apperson, J. M., & Bregman, N. J. (2008). First impressions and professor reputation: Influence on student evaluations of instruction. *Social Psychology of Education, 11*(4), 397-408. doi: 10.1007/s11218-008-9055-1
- Caukin, J. (2013). Looking for your next job? Here are the definitive top five Skype interview tips. Retrieved from <http://blogs.skype.com>
- Chartrand, T. L., & Bargh, J. A. (1996). Automatic activation of impression formation and memorization goals: Nonconscious goal priming reproduces effects of explicit task instructions. *Journal of Personality and Social Psychology, 71*(3), 464-478. doi: 10.1037//0022-3514.71.3.464
- Craiger, J., & Weiss, R. J. (1998). Traveling in cyberspace: Video-mediated communication. *The Industrial-Organizational Psychologist, 36*(2).
- Cronbach, L. J. (1955). Processes affecting scores on "understanding of others" and "assumed similarity". *Psychological Bulletin, 52*(3), 177-193.
- Facebook. (2013). Newsroom: Key Facts - Statistics. Retrieved from <http://newsroom.fb.com/Key-Facts>
- Fullwood, C. (2007). The effect of mediation on impression formation: A comparison of face-to-face and video-mediated conditions. *Applied Ergonomics, 38*(3), 267-273. doi: 10.1016/j.apergo.2006.06.002
- Funder, D. C. (1995). On the accuracy of personality judgment: A realistic approach. *Psychological Review, 102*(4), 652-670.
- Funder, D. C. (2012). Accurate personality judgment. *Current Directions in Psychological Science, 21*(3), 177-182. doi: 10.1177/0963721412445309
- Gonzales, A. L., & Hancock, J. T. (2008). Identity shift in computer-mediated environments. *Media Psychology, 11*(2), 167-185. doi: 10.1080/15213260802023433
- Gosling, S. D., Gaddis, S., & Vazire, S. (2007). *Personality impressions based on Facebook profiles*. Paper presented at the International Conference on Weblogs and Social Media, Boulder, CO, USA.
- Green, R. K., Evans, D. C., & Gosling, S. D. (2008). Researching first impressions in the age of online profiles. *Eye on PsiChi, 12*(3), 23-25.
- Haferkamp, N., & Krämer, N. C. (2010). Creating a digital self. Impression management and impression formation on social networking sites. In K. Drotner & K. C. Schröder (Eds.), *Digital Content Creation: Perceptions, Practices & Perspectives* (pp. 129-146). New York, NY: Peter Lang.
- Jiang, Y., Hughes, J. L., & Pulice-Farrow, L. (2014). Coworkers and supervisors on facebook? Effect of workplace friendship, trust, and sex. *Psi Chi Journal of Psychological Research, 19*(3), 144-153.
- Kim, J., & Lee, J. R. (2011). The Facebook paths to happiness: Effects of the number of Facebook friends and self-presentation on subjective well-being. *Cyberpsychology, Behavior, and Social Networking, 14*(6), 359-364. doi: 10.1089/cyber.2010.0374
- Kluemper, D. H., Rosen, P. A., & Mossholder, K. W. (2012). Social networking websites, personality ratings, and the organizational context: More than meets the eye? 1. *Journal of Applied Social Psychology, 42*(5), 1143-1172. doi: 10.1111/j.1559-1816.2011.00881.x

- Kujath, C. L. (2011). Facebook and MySpace: Complement or substitute for face-to-face interaction? *Cyberpsychology, Behavior, and Social Networking*, *14*(1-2), 75-78. doi: 10.1089/cyber.2009.0311
- Levin-Epstein, A. (2011). Ace your Skype job interview: 14 smart tips., 2014, from <http://www.cbsnews.com/news/ace-your-skype-job-interview-14-smart-tips/>
- Lim, K. H., Benbasat, I., & Ward, L. M. (2000). The role of multimedia in changing first impression bias. *Information Systems Research*, *11*(2), 115-136. doi: 10.1287/Isre.11.2.115.11776
- Liu, Y., Ginther, D., & Zelhart, P. (2002). An exploratory study of the effects of frequency and duration of messaging on impression development in computer-mediated communication. *Social Science Computer Review*, *20*(1), 73-80.
- Lorenz, K. (2009). Warning: Social networking can be hazardous to your job search. from <http://www.careerbuilder.com/Article/CB-533-Job-Search-Warning-Social-Networking-Can-Be-Hazardous-to-Your-Job-Search/>
- Manago, A. M., Taylor, T., & Greenfield, P. M. (2012). Me and my 400 friends: the anatomy of college students' Facebook networks, their communication patterns, and well-being. *Developmental Psychology*, *48*(2), 369. doi: 10.1037/a0026338
- Masip, J., Garrido, E., & Herrero, C. (2004). Facial appearance and impressions of 'credibility': The effects of facial babyishness and age on person perception. *International Journal of Psychology*, *39*(4), 276-289. doi: 10.1080/00207590444000014
- Mc Culloch, K. C., Ferguson, M. J., Kawada, C. C. K., & Bargh, J. A. (2008). Taking a closer look: On the operation of nonconscious impression formation. *Journal of Experimental Social Psychology*, *44*(3), 614-623. doi: 10.1016/j.jesp.2007.02.001
- Pontari, B. A., & Schlenker, B. R. (2004). Providing and withholding impression management support for romantic partners: Gender of the audience matters. *Journal of Experimental Social Psychology*, *40*(1), 41-51. doi: 10.1016/S0022-1031(03)00070-2
- Schlenker, B. R., Lifka, A., & Wowra, S. A. (2004). Helping new acquaintances make the right impression: Balancing image concerns of others and self. *Self and Identity*, *3*(3), 191-206. doi: 10.1080/13576500444000010
- Skinner, C. A. (2008). Employers admit checking Facebook before hiring. *PC World*.
- Swanson, D. (2013). 7 tips to nail a Skype interview. from <http://www.forbes.com/sites/learnvest/2013/04/09/7-tips-to-nail-a-skype-interview/>
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics*. Upper Saddle River, NJ: Pearson.
- Tong, S. T., Van Der Heide, B., Langwell, L., & Walther, J. B. (2008). Too much of a good thing? The relationship between number of friends and interpersonal impressions on Facebook. *Journal of Computer-Mediated Communication*, *13*(3), 531-549. doi: 10.1111/j.1083-6101.2008.00409.x

- Vonk, R. (1999). Impression formation and impression management: Motives, traits, and likeability inferred from self-promoting and self-deprecating behavior. *Social Cognition, 17*(4), 390-412. doi: 10.1521/Soco.1999.17.4.390
- Walther, J. B. (1992). Interpersonal effects in computer-mediated interaction: A relational perspective. *Communication research, 19*(1), 52-90. doi: 10.1177/009365092019001003
- Walther, J. B. (1993). Construction and validation of a quantitative measure of impression development. *Southern Journal of Communication, 59*(1), 27-33.
- Walther, J. B. (1996). Computer-mediated communication impersonal, interpersonal, and hyperpersonal interaction. *Communication research, 23*(1), 3-43. doi: 10.1177/009365096023001001
- Walther, J. B., Van Der Heide, B., Hamel, L. M., & Shulman, H. C. (2009). Self-generated versus other-generated statements and impressions in computer-mediated communication: A test of warranting theory using Facebook. *Communication research, 36*(2), 229-253. doi: 10.1177/0093650208330251
- Walther, J. B., Van Der Heide, B., Kim, S. Y., Westerman, D., & Tong, S. T. (2008). The role of friends' appearance and behavior on evaluations of individuals on Facebook: Are we known by the company we keep? *Human Communication Research, 34*(1), 28-49. doi: 10.1111/j.1468-2958.2007.00312.x
- Wang, S. S., Moon, S., Kwon, K. H., Evans, C. A., & Stefanone, M. A. (2010). Face off: Implications of visual cues on initiating friendship on Facebook. *Computers in Human Behavior, 26*(2), 226-234. doi: 10.1016/J.Chb.2009.10.001
- Whittaker, A. (2013). 13 tips for nailing a Skype interview. from <http://usat.ly/1ee7kwl>
- Willis, J., & Todorov, A. (2006). First impressions making up your mind after a 100-ms exposure to a face. *Psychological Science, 17*(7), 592-598. doi: 10.1111/j.1467-9280.2006.01750.x
- Yang, C.-C., & Brown, B. B. (2013). Motives for using facebook, patterns of facebook activities, and late adolescents' social adjustment to college. *Journal of Youth and Adolescence, 42*(3), 403-416. doi: 10.1007/s10964-012-9836-x

Footnotes

¹ The data collection session during which the confederate was recorded was included in Ftf analysis because no significant differences in ratings existed between that session and the other Ftf sessions, $t(57) = 1.51, p > 0.05, d = 0.46$.

² The same individual served as the confederate in both Study 1 & 2.

³ This figure might change as the dynamics of social networking evolve. Nonetheless, this figure continues to align well with the composition of social networks as recently described by Manago, Taylor, and Greenfield (2012).

⁴ Recall that a *reflected* square root transformation was made on these data. Thus, the interpretation of the positivity score is reversed. That is, smaller scores now represent greater positivity. See Tabachnick and Fidell (2013) for a more in-depth discussion of this issue.

APPENDIX A
Confederate Script for Introduction Speech

Good morning everyone, I am [name]. I am originally from Washington State, but I moved to Parker, Colorado in 2004; about a year after my high school graduation to be with my family. I am a nanny; I've been a nanny for five years for two little boys. When they're in school, I go to school at Arapahoe community college. I've been going there part time for five years. I'm studying to be a physical therapist assistant. I play the piano; I have been playing since I was eight years old. The little boys I watch I help them play the guitar. I love to cook, and I love sports. I play tennis and go to weekly lessons. I love going to the Broncos, Nuggets, Rockies, and Avalanche games. And I try to watch sports center every night before I go to bed. I grew up in a large family where we went to church every week. Around the age of 15 I stopped going to church. And just about a year ago I started going back and it has just improved my life and it has made me a better person. I say I'm a chill laid-back person, but my friends say I'm a complete pushover. I just say you can never be too nice. Thanks.