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Publicness and directedness: Effects of social media affordances on attributions and social perceptions

Bingjie Liu^{*}, Jin Kang

115 Carnegie Building, Donald P. Bellisario College of Communications, Pennsylvania State University, University Park, PA 16802, USA

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ABSTRACT

SNS users can define their communication context by manipulating a message's publicness and directedness, leaving behavioral traces for observers to interpret. This study investigated how publicness and directedness of a Facebook self-disclosure post influence observers' attributions and perceptions of the message and the message sender. With an online between-subjects experiment, participants ($N = 242$) were randomly assigned to be exposed to a post of either high or low publicness, either directed to a specific user or not, either about the positive aspect of the poster or about the negative aspect. Results showed high publicness led observers to make more dispositional attribution about the message sender's impression management intention, and self-disclosure was perceived as less intimate. Moreover, message sender was perceived as less likable due to such dispositional attribution. Directed message led to more interpersonal attribution, which further enhanced perceived message intimacy. Disclosure valence moderated influences of publicness and directedness. Specifically, negative self-disclosure on SNS was more associated with social norm violation and was not appreciated to be made public if it was not directed at anyone.

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1. Introduction

With social networking sites (SNS) attracting a wide range of users (Kim & Jung, 2016) and becoming important venues for self-disclosure (Bazarova & Choi, 2014), “we are what we post” (Schau & Gilly, 2003, p. 385). People draw inferences from our posts and form impressions of us accordingly (e.g. Walther, Van Der Heide, Hamel, & Shulman, 2009). This is especially true when people are at the stage of getting to know each other, and trying to learn more about each other by reading what others' have posted on social media (Carr & Walther, 2014). There exist anecdotal stories about employers checking out potential employees' Facebook in order to derive a comprehensive evaluation of candidates' personality (Ladkin & Buhalis, 2016). In such situations, we are what we post.

Besides the literal contents of what we post, *how* we post might also matter. On SNS, different groups of audiences who used to be separated in offline settings collapse into one giant audience group on SNS, referred to as “context collapse,” blurring the boundaries between public and private, and professional and personal (Davis &

Jurgenson, 2014; Marwick, 2011; Vitak, 2012). To help users better define the boundary of their communication space and regain control, many social media platforms afford users to customize *how* they send messages, so that SNS users can choose from different channels on SNS with various degree of publicness and directedness (Bazarova, 2012). More importantly, users' manipulation of message's publicness and directedness is sometimes made visible to other users, serving as contextual cues from which observers can infer the sender's personality and intentions behind the message (Marcus, Machilek, & Schutz, 2006).

By definition, publicness refers to “the probability that one's behavior will be observed by others and the number of others who might see or learn about it” (Leary & Kowalski, 1990, p. 38) and directedness refers to whether a message is targeted at a particular person or not. SNSs have affordances allowing users to manipulate the publicness and directedness of a message. For example, Facebook posts can be broadcasted to everyone or narrowcasted to specific others through channels such as status updates, posting on one's timeline, and private messaging (e.g., Bazarova, 2012; Oeldorf-Hirsch & Sundar, 2015). Besides those channels, by adjusting their privacy settings, users are able to manage the visibility of their status updates, from indiscriminate broadcasting to one-on-one private communication. In addition, many SNS

^{*} Corresponding author.E-mail addresses: bx15252@psu.edu (B. Liu), jbk5361@psu.edu (J. Kang).

platforms allow users to name out a person by “tagging” them in the message (e.g., Facebook, Twitter, etc.). For instance, a message visible to everyone has high publicness and a message with someone being “tagged” is considered as a directed message.

Observers not only rely on literal contents of what senders say to draw inferences about them, but also consider contextual factors altogether to reach a judgment (Goffman, 1959). With these behavioral traces of publicness and directedness available on SNS, observers might speculate reasons why the posters have set certain posts visible to everyone while making other posts visible to a smaller group of people. Similarly, observers might become curious as to why the posters have directed some posts to a particular someone. In other words, besides the literal contents of what we post, *how* we send the messages might also shape observers' perceptions about the message and the message sender. Following this line of thought, we are not only what we post, but also *how* we post.

To test this proposition, the current study aimed to examine how online self-disclosure of different publicness and directedness levels are interpreted and shape observers' social perceptions about the message and the message sender. Given the great popularity of Facebook and its role as a mainstream self-presentation venue (Bazarova & Choi, 2014; Duggan, Ellison, Lampe, Lenhart, & Madden, 2015; Rosenberg & Egbert, 2011), we used Facebook as our research context.

2. Literature review

2.1. Online behavioral traces and attribution

As amateur scientist, observers seek for explanations of human behaviors (Heider, 1958). In interpersonal communication, social judgments on communicators often involve “inference of intentionality, motive, and causality for another's behavior” (Seibold & Spitzberg, 1982, p. 87). Especially for online self-presentation, the intentional nature is quite prominent as users have more time to ponder and edit their “utterances” on social media and lose the spontaneity in face-to-face (FtF) encounters (Hogan, 2010; Leary & Kowalski, 1990). Given the increased user control over communication in online environments, self-expression on social platforms is almost exclusively intentional (Vazire & Gosling, 2004).

Therefore, interpretation of message meanings is often based on an implicit causal explanation of “why person X would be sending this message” (Newman, 1981, p. 124). Such attribution will further serve as references for social judgment and impression formation (e.g., Jiang, Bazarova, & Hancock, 2011; McMahan, 1976). As noted in Jiang and colleagues' study (2011), “attributions for self-disclosure become part of the meaning that the receiver assigns to the sender's message” (p. 62).

Based on Brunswikian's lens model, observers draw inferences about one's personality and intentions from the behavioral traces (see Brunswik, 1956). The underlying assumption is that individual's behaviors could reflect who they are and others can pick up the traces left by these behaviors and speculate characteristics underlying such behaviors. For example, in a study where participants speculated on targets' personality based on their offices and bedrooms, participants' judgments were largely congruent with those made by targets' acquaintances and themselves (Gosling, Ko, Mannarelli, & Morris, 2002).

Similarly, research on public cyberspace such as personal web-pages (Marcus et al., 2006; Vazire & Gosling, 2004) and Facebook (Tong, Van Der Heide, Langwell, & Walther, 2008; Walther, Van Der Heide, Kim, Westerman, & Tong, 2008) found that observers generate inferences from contextual cues beyond contents about one's characteristics. For instance, when judging a Facebook user, observers gave more credit to messages left by a user's friends

compared to messages left by the user himself/herself, because others' judgments are often considered as more objective and credible (Walther et al., 2009).

However, past studies have focused more on others-generated cues (e.g., attractiveness of one's Facebook friends, Walther et al., 2008) and system generated cues (e.g., the number of one's Facebook friends, Tong et al., 2008; the size of one's Klout score, Edwards, Spence, Gentile, Edwards, & Edwards, 2013). Fewer studies have focused on effects of user-generated cues beyond message features (e.g., Edwards & Harris, 2016), which are expected to be more directly linked to user's intentionality.

Message publicness and directedness together define the actual audiences and the targeted audiences of a message. Who the audiences are is important because it determines the context of communication and thus how the actors are going to perform (Goffman, 1959). Facebook has affordances that allow users to manage a communication space by setting a limit of visibility and picking out relevant friends for a post. When seeing a status update of a message sender, observers can also tell who else has access to the message from the privacy settings associated with the post and whether it is a directed message aiming for someone.

These affordances add extra contextual cues for the observers to form impression of the message sender, exerting their influence jointly with the message contents and uniquely of their own. Regardless of the linguistic aspects of the contents, the way how SNS users manipulate the context and the boundary of communication space can serve as cues from which observers derive a sense of who the senders are. The next question is how message publicness and directedness, as behavioral traces, are interpreted by third-person observers.

Conventionally, attribution style has been classified by a dispositional-situational dichotomy (Heider, 1958). Dispositional attribution appeals to individuals' internal characteristics as the cause of a behavior while situational attribution employs external or environmental factors as explanations (e.g., Hewstone, 1990; Kelley, 1972, 1973; Tetlock, 1985). However, for SNS, a platform that aims to connect people (Boyd & Ellison, 2007), self-presentation is often interpreted in a relational context. To better reflect the relational nature of interpersonal communication, Newman (1981) brought in a new dimension, interpersonal attribution, to account for a common interpretation that people send messages because of their relationship with the message recipients, which could not be easily categorized as dispositional or situational attribution. As found in the study on self-disclosure computer-mediated communication (CMC) settings (Jiang et al., 2011), the link between self-disclosure and perceived interpersonal intimacy was intensified in CMC compared with FtF communication because interpersonal attribution was enhanced in CMC.

Given the voluntary and intentional nature of self-disclosure on SNS, situational attribution was not considered in this study. Therefore, answers to the focal question “why person X would be sending this message” (Newman, 1981, p. 124) could be a) because of person X's trait (dispositional attribution), or b) because person X has a relationship with someone (interpersonal attribution). Depending on the nature of attribution, observers may form certain impression and judgments on both the message and the message sender (e.g., Jiang et al., 2011; McMahan, 1976; Seibold & Spitzberg, 1982). Given that SNS is an interpersonal and relational platform, we are specifically interested in how intimate the message is perceived and how attractive the message sender is perceived, two main drivers of relational outcomes, as have been investigated in many interpersonal studies (e.g., Bazarova, 2012; Burgoon & Hale, 1984; Burgoon & Newton, 1991; Burgoon, Manusov, Mineo, & Hale, 1985; Rubin, 1975; Utz, 2015).

2.2. Publicness and impression management intention

Observers interpret behavioral traces in certain ways because certain behaviors are associated with certain prototypes in mind developed from their experience (Feldman, 1981; Graham, 1995). In self-presentation and impression formation literature, publicness is seen as related to motivation for impression management because “public behaviors are more likely to be relevant to the accomplishment of one’s [impression management] goals than are private behaviors” (Leary & Kowalski, 1990, p. 38).

Empirical studies have also found the association between publicness of communication context and the salience of impression management concerns. A recent study on partisan users of Facebook found that users are concerned and anxious about the impressions they might leave on others when deciding whether to “like” a post from a political party and thus revealing one’s partisan affiliation. However, once they can “like” a message secretly without being seen by any other users other than the message sender, they are more likely to “like” the message (Marder, Slade, Houghton, & Archer-Brown, 2016). As found in a survey by Krämer and Winter (2008), individual’s self-efficacy regarding impression management is strongly correlated to the number of friends one has on SNS, suggesting that generating messages that might be seen by a larger population demands higher-level skills in impression management. A study about support seeking message generation on social media (Oh & LaRose, 2016) found that when participants were instructed to compose messages using a public SNS channel (as opposed to a private SNS channel), their impression management goal became more salient and they devoted more efforts and employed more impression management strategies in message production.

The pervasive covariation of publicness and impression management motive might have been adopted as part of one’s implicit theory based on which inferences are drawn (Jones & Davis, 1965; Kelley, 1973; Reeder & Trafimow, 2005). Either through projection or perspective taking (Reeder & Trafimow, 2005), when a message is sent publicly (as opposed to privately), observers are expected to infer a stronger impression management intention of message senders underlying their message sending behavior. Besides, research suggests that observers draw inferences about one’s motive spontaneously upon their exposure to the behaviors even under no explicit request for attribution making (Fiedler & Schenck, 2001; Kawada, Oettingen, Gollwitzer, & Bargh, 2004; Vonk, 1998). Therefore, we hypothesized that seeing self-disclosure of high publicness will facilitate observers to attribute the disclosure to message sender’s dispositional factors — intention to manage one’s impression on other people.

Impression management is a process through which individuals try to control or influence others’ perceptions towards them (Leary & Kowalski, 1990), which has been found as a common goal in interpersonal influence episode (termed as interaction goal in Dillard, Segrin, & Harden, 1989). Although proper impression management leads to satisfying interpersonal outcomes (e.g., Baron, 1989; Wayne & Liden, 1995), the intention of impression management is not socially desirable. In nature, impression management is about manipulating others’ thoughts, and therefore, poses a threat to other’s freedom and negative face (Pandey & Singh, 1986; Rauthmann & Kolar, 2013), which might further lead to undesirable interpersonal judgements (Baron, 1989; Gilmore & Ferris, 1989; Tseëlon, 1992).

As found in Baron (1989), once impression management tactics were over employed by interviewees to the extent that interviewers could discern their intention to influence them, interviewers perceived them as manipulative or insincere and gave them lower ratings. Additionally, in an experiment examining

reactions to manipulative social behavior (Pandey & Singh, 1986), participants evaluated manipulative behavior negatively and showed dislike for these manipulative actors (Pandey & Singh, 1986). Manipulative personality such as Machiavellianism has also been found to have negative effects on one’s social attraction, especially in the early stage of relationship development (Rauthmann & Kolar, 2013). A recent study examining effects of posting selfies on social media also found that people evaluated selfies posters negatively because they perceived there was an impression management motivation behind selfie posting (Krämer et al., 2017). Actually, hiding one’s intention of impression management by strategically performing, characterized as “calculated unintentionality,” is often what impression managers try to achieve (Goffman, 1959, p. 9).

Facebook users are aware that message of high publicness, e.g., public status updates, will reach more of their network and garner more responses than less public means of communication (Vitak & Ellison, 2013; Wohn, Lampe, Vitak, & Ellison, 2011). In fact, their posts generally reach even more individuals than they have anticipated (Bernstein, Bakshy, Burke, & Karrer, 2013). With this in mind, attributing public self-disclosure to one’s impression management intention should reduce the intimacy attached to the message, as a public performance can hardly be associated with anything personal and intimate (Priest, 1995). Instead, information kept as a secret is associated with greater intimacy (Caughlin, Scott, Miller, & Hefner, 2009).

Empirical findings are also congruent with predictions above. In Bazarova (2012) study on social judgments on Facebook, participants were shown screenshots of messages sent via status updates, wall post, and private messaging. Results revealed that messages sent as private messages were perceived as more intimate than those sent via wall posting and status updates, controlling for message contents. In Study 2 (Bazarova, 2012), message sent via private messaging led to more liking for the message sender than that sent via wall post, also controlling for the effect of message contents.

Although in studies by Bazarova (2012) publicness was not specially manipulated and these Facebook channels also differ from each other in other respects which might confound with publicness, such as the visual aspects of the interface, message directedness, etc., the findings are in line with our predictions that message of higher publicness will be perceived as less intimate and the message sender as less likable given that status updates and wall posts have higher level of publicness than private messaging. As discussed so far, such effect should be mediated by observers’ interpretation, which in this case, is dispositional attribution of sender’s impression management intention. Based on the theoretical discussions and empirical findings above, we derive the following hypotheses.

H1. Higher publicness will lead to a) higher degree of dispositional attribution of sender’s impression management intention, b) lower level of perceived message intimacy, and c) lower level of liking for the sender.

H2. Perceived impression management intention mediates the relationship between level of publicness and a) message intimacy and b) sender’s social attraction.

2.3. Directedness and interpersonal attribution

Different from publicness, directedness is about whether the message is targeting at any specific audiences, i.e., whom the message is for. Studies have found that directed message is associated with higher degree of personalism (Jones & Davis, 1965),

which means the happening is “uniquely conditioned on the presence of a targeted individual” (Bazarova, 2012, p. 817). Such directed communication is often interpreted as “the recipient has been singled out because he is trustworthy and a good candidate for an intimate relationship” (Jones & Archer, 1976, p. 181). As a cue of directedness added onto a plain message, it is expected to elicit more interpersonal attribution, i.e., attributing the message as being sent out of relational goals. Therefore, we hypothesized that directedness of self-disclosure may facilitate observers to make interpersonal attributions on SNS.

H3. Higher directedness will lead to higher level of perceived interpersonal intention of the sender.

Although research has found increased interpersonal attribution of one's self-disclosure leads to higher perceived intimacy and interpersonal liking in CMC (e.g., Jiang et al., 2011; Kashian, Jang, Shin, Dai, & Walther, 2017), such findings are often premised on the condition when the judge himself/herself is the targeted audience and the interpersonal attribution is about the relationship between the sender and the judge. In the current context, however, the third-person observer is not the target. Therefore, we come up with research questions regarding effects of message directedness on perceived message intimacy and sender's social attraction.

RQ1. Does high directedness lead to a) higher level of perceived message intimacy, and b) higher level of liking for the sender?

RQ2. Does perceived interpersonal intention of the sender mediate the relationship between message directedness and a) message intimacy and b) liking for the sender?

2.4. Effects of disclosure valence

Although the primary goal of this study is to investigate the effect of *how* we post on social perceptions, message contents are still central to communication (Burlinson, 2010). Depending on sociocultural norms and communication contexts, positive and negative self-disclosure, i.e., whether it is a good or bad fact about oneself, might be perceived differently. In many cultures, revealing negative experiences such as suffering from diseases, being betrayed, often happens among people who are close to each other, whereas it is acceptable sharing good news about oneself to those who are not so close (Archer & Berg, 1978; Orrego et al., 2000; Priest, 1995). Therefore, negative self-disclosure might be perceived as more intimate than positive self-disclosure. In terms of social attraction, it is more normative and more common for SNS users to post positive aspects about themselves because SNS is not a typical communication context for people of close relationship to talk about misfortunes (Bazarova, 2012; Utz, 2015). Norm violation could lead to negative judgments and reduce liking for the message sender (Bazarova, 2012). Therefore, we hypothesize that

H4. Negative self-disclosure leads to (a) higher perceived message intimacy and (b) lower social attraction of message sender, compared with positive self-disclosure.

Given social norms on the compliance between disclosure contents and contexts, there should also be interaction effects of *how* and *what* we post on social perceptions such that for certain contents, one context is more suitable than another (Altman & Taylor, 1973). For example, as found in Edwards and Harris (2016), directedness of face-giving post on Twitter is preferred but if the message is face-threatening, non-directed post is preferred. Study by Richey, Ravishankar, and Coupland (2016) found that posts not aligned with their contexts caused by blurred boundaries damaged fostered impressions. As found in

Bazarova's study (2012), public intimacy, i.e., posting intimate messages in public, was regarded as less appropriate than sending them privately and led to less liking for the message sender in that it violated the social norm that intimacy should be kept private or among close others. Therefore, we hypothesized

H5. Disclosure valence moderates the effects of message publicness, and directedness on (a) perceived message intimacy and (b) social attraction of message sender.

3. Methods

3.1. Experiment overview

The study is a 2 (low publicness vs. high publicness) x 2 (non-directed vs. directed) x 2 (negative self-disclosure vs. positive self-disclosure) between-subjects online experiment. Participants were recruited from two groups: college students of an introductory communication class participating for extra credits and Amazon Mechanical Turk workers participating for a small amount of monetary reward. Participants were randomly assigned to one of the eight conditions with a screenshot of fictitious Facebook page displaying a post purported to be posted by a Facebook user, with its publicness, directedness and valence manipulated. After the exposure, participants were asked about their perceptions of the post and the “user” and their attributions of the posting behavior.

3.2. Participants

One hundred sixty participants from Amazon Mechanical Turk and 142 participants from undergraduate courses were recruited for the study. After removing participants who failed on manipulation check (described below), we had a total of 242 participants (Male = 102, 42.5%; $M_{age} = 30.48$, $SD_{age} = 13.47$). Most participants were females (57%) and European American (80.6%). The mean age was 30.48 ($SD_{age} = 13.47$). On average, participants have been using Facebook for 6.68 years ($SD = 2.36$).

3.3. Stimulus creation

To create the positive and negative self-disclosure messages for the experiment, we conducted a pre-test by asking participants to rate 9 texts in the form of Facebook post created by the researchers on their disclosure valence (i.e., “How negative is this person's disclosure” and “How positive is this person's disclosure?”). We also prepared three relevant pictures for each text and asked participants to rate each picture on how well it matched with the given text. The texts rated as most negative and most positive were chosen as final study stimuli. Furthermore, the picture rated as most appropriate for a given text was selected and presented together with the text as a post.

The positive self-disclosure post selected for this study was a message about a person's trip planning to Florence (i.e., “I have never doubted my ability. A gift to myself for a job well-done. I so earned this. Florence 2016 here I come!”) with a picture of Florence city view. The negative self-disclosure post was a message addressing a person's trust issue (i.e., “Can't seem to trust anyone since my partner left. I just can't. I'm sorry.”) with a picture of a tree standing in gloomy weather.

Eight fictitious Facebook user profiles under a gender-neutral name “Taylor Williams” were created, each with corresponding publicness and directedness cues and valence of the Facebook post manipulated. The current study employed an existing publicness cue in Facebook, which is represented by a globe icon. An only addition to the cue was an inclusion of a black text box that

appeared on a top of the globe icon to clearly indicate the post's publicness setting (i.e., "Shared with Public" vs. "Shared with Close Friends"), which in real life can also be displayed if users hover their cursor on the icon. Directedness cue was represented by an index finger pointing icon, created by the current researchers. It appeared next to the globe icon, with a black text box appearing on top of it clearly indicating a post's directedness setting (i.e., "For: Non-specified vs. "For: Jamie Machvoic"). The background of the Facebook profile was blurred in order to induce participants to focus on the message and its publicness and directedness (see Appendix A).

3.4. Procedures

Main experiment was administered on *Qualtrics*, an online data collection platform. Participants were told that researchers were introducing a new Facebook feature called "directing" and they were examining whether "directing" feature together with an existing "publicness" feature can enhance user experience. They received a brief introduction on (a) what directing feature does and how it looks like, and (b) what publicness feature does and how it looks like. Later on, they were told that they would be exposed to a screenshot of a recent Facebook post from a Facebook user who was one of the beta users for the new "directing" feature, and the screenshot of the user's profile was partly blurred to protect the user's privacy. After being exposed to the Facebook profile assigned to them, they proceeded to the questionnaire.

3.5. Measures

Unless otherwise stated, all continuous variables were measured on a 7-point Likert scale or semantic differential scale.

3.5.1. Manipulation check

To make sure participants understood the context, they were asked to briefly describe (a) the content of the post they just read, (b) the function of publicness feature, and (c) the function of directing feature. Then they were asked to answer whom the post was visible to and directed to. Participants who provided wrong answers or "I don't know" to any one of the manipulation check questions were eliminated from the analysis. As previously mentioned, our final dataset consisted of 242 participants.

3.5.2. Measures of key variables

3.5.2.1. Dispositional attribution. Consistent with the theoretical definition of dispositional attribution in this specific context, i.e., a self-orientated impression management intention, 5 items about one's impression management intentions were created based on the measures and findings in Jiang et al. (2011) and Bazarova and Choi (2014). Items include "The poster made this post to manage his/her impression on others," "The poster made this post to make others think of him/her in a certain way," "The poster made this post because s/he wants the contents of the posts to be known," "The poster made this post to seek social approval," and "The poster made this post to seek public attention" (Cronbach's $\alpha = 0.74$).

3.5.2.2. Interpersonal attribution. Interpersonal attribution was measured with 5 items adapted from Jiang et al. (2011), such as "The poster made this post because of his/her unique relationship with certain people," "The poster made this post to let certain people see what is going on in his/her life," and "The poster made this post to establish a unique culture with certain people" (Cronbach's $\alpha = 0.72$).

3.5.2.3. Message intimacy. A 4-item semantic differential scale adapted from Caughlin et al. (2009) was used to assess perceived

intimacy of the post. Items were "Non-intimate – Intimate," "Impersonal – Personal," "Public – Private," and "Superficial – In-depth" (Cronbach's $\alpha = 0.80$).

3.5.2.4. Social attraction. A 6-item scale adapted from McCroskey and McCain (1974) was used to measure participants' liking for the Facebook poster. For example, items are "I would like this person to be my Facebook friend," "This person would be pleasant to be with," and "This person just wouldn't fit into my circle of friends" (Cronbach's $\alpha = 0.85$).

4. Results

As participants were recruited from different sources and were rewarded differently, we conducted independent samples *t*-test to examine whether participants recruited from colleges and mTurk differed on main dependent variables. No significant differences emerged for dispositional attribution, $t(240) = -0.80$, $p = 0.42$, two tailed; interpersonal attribution, $t(240) = 0.52$, $p = 0.61$, two tailed; message intimacy, $t(239) = 1.02$, $p = 0.31$, two tailed; and social attraction, $t(240) = -1.41$, $p = 0.16$, two tailed. Therefore, these two groups were combined and analyzed together in further analysis.

To examine the effects of publicness, directedness, and valence of self-disclosure on observers' attribution, message intimacy, and sender's social attraction, three-way analysis of variance (ANOVA) were conducted with dispositional attribution, interpersonal attribution, message intimacy and sender's social attraction as dependent variables respectively.

4.1. Effect of publicness

In line with H1a, ANOVA results revealed that message publicness has a significant positive main effect on dispositional attribution of the sender's impression management intention, $F(1, 234) = 9.30$, $p = 0.008$, partial $\eta^2 = 0.04$. Specifically, for the message with high publicness, the sender was perceived as having more impression management intention ($M = 4.83$, $SE = 0.10$) than for the message with low publicness ($M = 4.39$, $SE = 0.10$). Therefore, H1a was supported.

In line with H1b, publicness was also found to have a significant negative effect on message intimacy, $F(1, 233) = 15.57$, $p < 0.001$, partial $\eta^2 = 0.06$. Message sent with low publicness was perceived as more intimate ($M = 4.77$, $SE = 0.12$) than that with high publicness ($M = 4.11$, $SE = 0.12$). Therefore, H1b was also supported.

Contradictory to H1c, no main effect of publicness was found on message sender's social attraction, $F(1, 233) = 0.10$, $p = 0.75$, partial $\eta^2 = 0.00$. However, a three-way interaction effect of publicness, directedness and disclosure valence was found on social attraction, which will be decomposed later.

4.2. Effects of directedness

As predicted by H3, message directedness was found to have a significant positive effect on observers' interpersonal attribution, $F(1, 234) = 5.77$, $p = 0.017$, partial $\eta^2 = 0.02$. Specifically, directed message led to more interpersonal attribution ($M = 4.72$, $SE = 0.16$) than non-directed message ($M = 4.17$, $SE = 0.17$).

In response to RQ1a about effects of directedness on message intimacy, no significant effect was found, $F(1, 233) = 0.11$, $p = 0.74$, partial $\eta^2 = 0.00$. In response to RQ1b about effects of directedness on social attraction, also no significant effect was found, $F(1, 234) = 0.21$, $p = 0.65$, partial $\eta^2 = 0.00$.

4.3. Effects of valence

Valence was not found to have any impact on observers' attribution. However, as predicted by H4a, valence was found to have a main effect on perceived message intimacy, $F(1, 233) = 54.12$, $p < 0.001$, partial $\eta^2 = 0.19$. Specifically, negative self-disclosure was perceived as more intimate ($M = 5.05$, $SE = 0.11$) than positive self-disclosure ($M = 3.83$, $SE = 0.12$). As for social attraction, as predicted by H4b, positive self-disclosure led to more liking for the sender ($M = 4.44$, $SE = 0.11$) than negative self-disclosure ($M = 3.60$, $SE = 0.10$), $F(1, 234) = 34.54$, $p < 0.001$, partial $\eta^2 = 0.13$.

4.4. Conditional effect of publicness, directedness on social attraction

In line with H5, we found a 3-way interaction effect on perceived sender's social attraction, $F(1, 234) = 4.81$, $p = 0.029$, partial $\eta^2 = 0.02$. Directedness and publicness had different effects for negative disclosure and positive disclosure. Specifically, publicness and directedness did not make a significant difference given the self-disclosure was positive. However, in the case of negative self-disclosure, there was a significant interaction effect of publicness and directedness, $F(1, 133) = 4.60$, $p = 0.03$, partial $\eta^2 = 0.03$. Specifically, if the post was not directed to anyone explicitly, public disclosure ($M = 3.48$, $SE = 0.19$) was perceived as less likable than non-public disclosure ($M = 4.00$, $SE = 0.21$). However, if the negative disclosure was explicitly indicated as for someone, making it public ($M = 3.64$, $SE = 0.16$) did not make the sender significantly less likable than non-public disclosure ($M = 3.26$, $SE = 0.19$). Therefore, H5 was supported.

4.5. Mediation analysis

To test the hypotheses about the mediating role of attribution, we used Preacher and Hayes (2008) PROCESS macro to create 5000 bootstrap re-samples. Across all samples, the mean estimated indirect effect for the mediational path was computed, as well as the bias corrected 95% confidence intervals (CI) and standard errors for each of these estimates. Shrout and Bolger (2002) recommended that the CIs be investigated for the indirect path to determine significance levels. If zero is not included within the range of the CIs, the indirect effect is statistically significant. To test H2 and to answer RQ2, four models were tested with publicness as the independent variable, dispositional attribution as mediator, and directedness as the independent variable and interpersonal attribution as mediator respectively, and with message intimacy and social attraction as dependent variables, with Model 4 in PROCESS macro (Hayes, 2013).

4.5.1. Effects of publicness via dispositional attribution

As shown in Fig. 1, although publicness was found to have a significant negative total effect of on perceived message intimacy, dispositional attribution did not mediate the relationship between publicness and perceived message intimacy $b = 0.03$ ($SE = 0.04$), CI $[-0.04, 0.14]$. Therefore, H2a was not supported.

As shown in Fig. 1b, we found a significant indirect effect of publicness on sender's social attraction via dispositional attribution, $b = -0.08$ ($SE = 0.04$), CI $[-0.19, -0.02]$. In other words, dispositional attribution mediates the relationship between publicness and sender's social attraction. Therefore, H2b was supported. However, as the total effect of publicness on social attraction was not statistically significant, it suggests that although dispositional attribution of public posts reduced perceivers' liking for the sender, there are other mechanisms going on suppressing or canceling this negative effect out.

4.5.2. Effects of directedness

As shown in Fig. 2a, we found the indirect effect of directedness on message intimacy via interpersonal attribution was statistically significant, $b = 0.12$ ($SE = 0.11$), CI $[0.01, 0.40]$. In other words, interpersonal attribution positively mediated the relationship between message directedness and perceived message intimacy. However, given that the total effect of directedness on perceived message intimacy was insignificant, there might be other mechanisms other than interpersonal attribution that cancel this positive indirect effect out.

As shown in Fig. 2b, the indirect effect of message directedness on sender's social attraction via interpersonal attribution was not statistically significant, $b = 0.04$ ($se = 0.09$), CI $[-0.00, 0.27]$. We also found no significant direct effect of message directedness on sender's social attraction.

5. Discussion

Facing the collapsed contexts on SNS, users can actually redefine their communication space by manipulating message publicness and directedness afforded by the platform. This study examined the impact of publicness and directedness of one's self-disclosure post on observers' attribution and perceptions about both the message and the message sender in the context of SNS, with a 2 (low publicness vs. high publicness) \times 2 (non-directed vs. directed) \times 2 (negative self-disclosure vs. positive self-disclosure) between-subjects experiment.

5.1. Effect of publicness

Consistent with impression management literature, highly public self-disclosure led individuals to make dispositional attribution of a message sender's impression management intention (Leary & Kowalski, 1990). In addition, consistent with findings in impression management and personality research (Pandey & Singh, 1986; Rauthmann & Kolar, 2013), such attribution further reduced his/her social attraction.

Although dispositional attribution was found to mediate the relationship between publicness and sender's social attraction, the overall effect of message publicness on social attraction was not found significant. It suggests that message publicness might also be associated with some positive attributes, such as one's openness, that could have cancelled out the negative indirect effect of the dispositional attribution of their manipulative intention. In this study, low publicness was operationalized as a cue saying "Shared with: Close friends." If the observer is not one of the close friends who have access to this message, from a third-person perspective, it leaves an impression of exclusiveness and being less open, as the message recipient was not one of the sender's "close friends."

In real life, if you are not granted a permission for a message, you are not supposed to see the message at all, which seems to compromise the generalizability of this study. However, it provides knowledge about how individuals feel about the very behavior of posting messages publicly or exclusively. In fact, sometimes it happens that people eventually find out from other sources that their Facebook friends post something behind them. In this case, publicness might be appreciated. The appreciation for being public and the dislike for public posting due to interpretation of a manipulative intention could co-exist and drive the gross effect of message publicness on liking for message senders to be non-significant, which might explain why message publicness was not found to have a significant impact on perceived sender's social attraction in the current study.

Similar hypotheses had been tested in Bazarova's study (2012) on public intimacy. However, at odds with findings in that study,

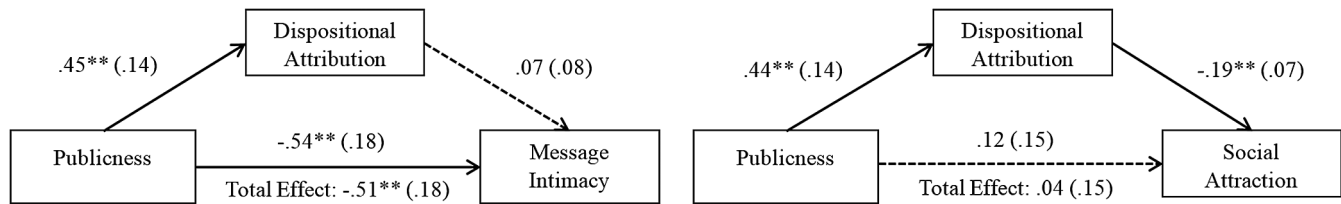


Fig. 1. a: Mediation Effect of Dispositional Attribution between Publicness and Message Intimacy. b: Mediation Effect of Dispositional Attribution between Publicness and Social Attraction. Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

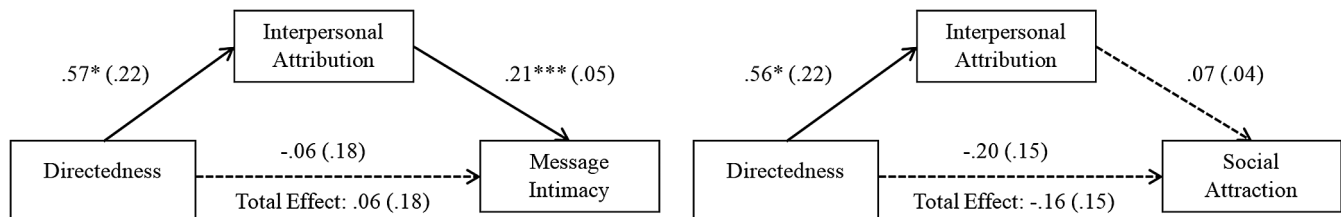


Fig. 2. a: Mediation Effect of Interpersonal Attribution between Directedness and Message Intimacy. b: Mediation Effect of Interpersonal Attribution between Directedness and Social Attraction. Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

where the same message sent via private messaging led to more liking of the message sender compared to that posted as on a Facebook “wall,” suggesting the negative effect of publicness on social attraction, this study did not find a significant total effect of publicness on social attraction but only found a negative indirect effect via dispositional attribution of one’s manipulative intention.

Comparing the contexts and operationalizations of the two studies, two explanations seem to be plausible for the non-significant total effect of publicness on social attraction found in the present study. First, in Bazarova (2012) study, publicness was operationalized at two levels, a wall post that was visible to all Facebook friends and a private messaging that was only available to one person. The contrast between these two levels, many versus one, might be perceived as larger than that in our study, which was between visibility to all Facebook users and visibility to “close friends” (many vs. some). It is possible that our manipulation failed to create two levels distinct enough from each other to have any impact on message sender’s social attraction. Future study could try to probe the threshold for publicness to have an effect on perceived social attraction.

The second explanation is that in Bazarova (2012) study, the variance in perceived sender’s social attraction was not caused by message publicness itself. She compared two existing channels that were afforded on Facebook, i.e., wall post and private messaging. However, message publicness was not the only factor on which they differ from each other. Although both private message and wall post are directed to a specific friend, in a wall post, together with the message contents, this interpersonal relationship is also made public. Therefore, wall post leading to less social attraction could be due to the fact that displaying relationship publicly is perceived as not socially desirable. In other words, effect of message publicness is confounded by relational publicness in that study because they co-occur in the wall post channel.

We found that message publicness reduced perceived message intimacy, which is consistent with findings in Bazarova (2012) study where message sent via private messaging on Facebook was perceived as more intimate than the very same message sent via wall post or public status updates. There has long been a debate on whether it is attribution or perceived scarcity of the information that makes low-publicness information intimate and desirable (Archer & Cook, 1986; Petty & Mirels, 1981). Scarcity means

unavailability (Lynn, 1991) and the scarcer something is, the more valuable the object tends to be perceived as (Brock, 1968). Given that attribution was not found to mediate the effect of publicness on message intimacy, it could have been the “scarcity heuristic” that leads observers to perceive low-publicness disclosure as more intimate.

5.2. Effect of directedness

Directedness was found to lead to interpersonal attribution. Seeing a message being directed to someone drives observers to attribute the posting behavior as out of the intention for a relationship development between the sender and the audience(s). Such an interpersonal attribution was found to further increase perceived message intimacy. Nevertheless, the overall effect of directedness on message intimacy was not significant. This finding is consistent with what was found in Bazarova (2012) where public post and wall post, two channels differing in directedness, were not different in terms of message intimacy.

However, theories suggest that directedness of message enhances intimacy because it means communication is contingent on the presence of the audience (Jones & Davis, 1965). The sense of personalism makes the person feel special and consider the message as intimate (Bazarova, 2012; Jones & Davis, 1965). However, this proposition originated from interpersonal settings where the audience him/herself is the target audience. In both Bazarova (2012) study and the current study, the perceiver was a third person rather than a target audience. The inconsistency with existing literature about the effect of directedness could result from the perspective differences. As participants in this study were not the target audiences, they had not to perceive the post from the perspective of the target. For those who generated interpersonal attribution, they perceived the message as more intimate. For those who did not, they did not necessarily think the directed message as more intimate.

Although we did not find the main effect of message directedness on perceived sender’s social attraction, we found the effect of directedness interacting with the message publicness and self-disclosure valence. In other words, effect of message directedness is also contingent on message publicness and valence, which we would provide more interpretation following the discussion on

effects of disclosure valence.

5.3. Effect of disclosure valence

Consistent with implications from self-disclosure studies done in North American culture (Bazarova, 2012; Berg & Archer, 1978; Orrego et al., 2000; Priest, 1995; Utz, 2015), the valence of self-disclosure was found to have a significant impact on perceived message intimacy and the social attraction of a message sender. Negative self-disclosure was perceived as more intimate in that it is often associated with communication with close others. However, negative self-disclosure also reduced the sender's social attraction. Interestingly, disclosure valence was not found to influence observers' attributions. Positive and negative self-disclosure did not differ from each other in being interpreted as out of one's impression management goal or relational goals.

We found a three-way interaction effect on sender's social attraction. Overall, we did not find a main effect of publicness or directedness on social attraction. The three-way interaction suggests that effects of publicness and directedness are contingent on disclosure valence and there might be different social norms or expectations for positive and negative self-disclosure in terms of their publicness and directedness. Specifically, for positive self-disclosure, we found that publicness and directedness did not influence sender's social attraction as much as they did for negative self-disclosure. For negative self-disclosure, when posted with high publicness, directedness is preferred; while if posted with low publicness, non-directedness is preferred.

As found in Bazarova (2012), public intimacy, i.e., disclosing intimate information that is supposed to be reserved for close friends to the public (Priest, 1995), is considered as socially inappropriate. As negative disclosure seems to be seen as intimate and something reserved for close others, public negative self-disclosure might reduce sender's social attraction (Bazarova, 2012). Directedness in such a situation is preferred because directing a message at someone explains why this socially inappropriate behavior is done and somewhat excuses the message sender. However, in the low-publicness situation, directedness might not be preferred because it adds even more exclusiveness on what is already communicated by the low-publicness settings.

Lastly, it is possible that our self-disclosure statements did not vary strictly at the dimension of positivity-negativity (see Appendix A). Our positive self-disclosure statement may have contained an element of "showing-off" and hence, perceived negatively by participants. As such, this "showing-off" element might have compromised the likability of the positive disclosure. However, based on our current finding, we can infer that this showing off element might not be significant enough to override the positive effect of positive self-disclosure on message sender's social attraction.

6. Implications

Theoretically, this study contributes to CMC literature by exploring how interpersonal social norms have formed around communication technology affordances and how these affordances influence interpersonal processes of attribution and impression formation together with message contents. In line with the assumption of Social Information Processing Theory (SIP; Walther, 1992, 1993) that communicators use whatever cues available to make sense of interpersonal messages, this study found that cues available did make a difference in how observers perceive sender's intention behind the communication and social perceptions. As past studies have focused on others- or system-generated cues or verbal aspects of communication (e.g., Edwards & Harris, 2016;

Edwards et al., 2013; Tong et al., 2008; Walther et al., 2008), this study extends the predictions of SIP to user-generated contextual cues. Given the user-generated nature, they are expected to have more implication on intention attribution and social perception, which deserves more attention in future research in CMC.

As suggested by Modality-Agency-Interactivity-Navigability (MAIN) model (Sundar, 2008), interface cues can trigger heuristics, i.e., mental shortcuts associated with those cues, and facilitate formation of certain perceptions, depending on the nature of the triggered heuristics. Findings in this study seem to support the thesis of MAIN model. We found that attribution did not fully mediate the relationships between publicness and directedness cues and one's perceptions of message and message sender, suggesting those cues might also be associated with other attributes that have implications on impression formation. For example, based on the findings of the current study that high publicness reduces perceived message intimacy, but mixed effects on sender's social attraction, publicness cue might be associated with high accessibility, and low scarcity, and high openness. Directedness cue might be associated with triggering heuristics related to exclusiveness. As this study focused on the attributional routes of those cue effects, future study should explore potential heuristics associated with social media affordances and interface cues.

Another theoretical contribution of this study is in the area of interpersonal communication in general. Although it has been well-demonstrated that personal self-disclosure enhances relational intimacy and liking of the discloser (Archer & Cook, 1986; Bazarova, 2012; Petty & Mirels, 1981), the idea of being "personal" has not been well explicated. As low publicness and directedness tend to coincide in Face-to-Face communication and together create a "personal" communication context, the effects of publicness and directedness could be hard to disentangle. Therefore, by testing the two concepts separately, this study helps to answer the questions about effects of specific contextual factors, which could be hard to answer directly by manipulating the communication settings offline naturally.

Methodologically, compared with the paradigm of feature-based model (e.g., Hancock, Thom-Santelli, & Ritchie, 2004), i.e., testing effects of publicness and directedness with existing social media channels (e.g., Bazarova, 2012), this study was able to argue more confidently about the effects publicness and directedness on social perceptions rather than relying on speculations by controlling the interface background and fully crossing the conditions of publicness and directedness.

Practically, for general users of SNS, they are encouraged to consider the potential relational outcomes as a result of *what* and *how* they post their message. To help users avoid being perceived in a negative light, social media designers may develop a setting that allows users to hide their privacy settings from others, thereby giving users with more control in boundary management. An interesting challenge for social media designers is developing an interface cue that could "correct" for others' dispositional attribution of a user's impression management intention. People make dispositional inferences towards an observed behavior because they often do not take into account the situational factors in their evaluation (i.e., situational attribution, Ross, 1977). Past studies have shown that people's dispositional inferences can be "corrected" when situational factors become salient (e.g., Trope & Gaunt, 2000). In the context of SNS, in conjunction with the publicness cue, an interface cue that makes the situation factors salient may prevent others from readily forming dispositional inference about a user's message. For instance, with a Facebook user who publicly posts about their recent travel, presentation of the post with a cue that displays situational factors (e.g., they haven't travelled for a long period) may discourage others from making

dispositional attribution of the user's impression management intention. Given this, future researchers are encouraged to examine a unique interplay between the publicness and directedness cues and situational attribution, as well as which attribution style will take precedence over another under which combination of cues, and how certain type of attribution can be "corrected."

As for the directedness cue, social media designers may consider incorporating this cue in ways that others can infer a user is trying to enhance one's interpersonal relationship with a targeted person. Recently, many SNS offer a wide range of emoticons to be embedded in posts. Emoticons enables users to express their facial expression online. As such, when others can see the type of facial expression a user is making at a targeted person via emoticons (e.g., a face with heart eyes), they may more readily form an interpersonal attribution. Similarly, the directedness cue coupled with "a shared memory cue," which can indicate a user has special memories with a targeted friend, could be a viable option. In many SNS, users can tag their friends on their pictures. When other users hover over this "shared memory cue", which can be displayed beside the directedness cue, they will be able to see pictures of a user and a targeted person together. These pictures may positively influence others' evaluation about a user and their message.

7. Limitations

In this study, message effects were examined in a non-relational context in that participants are not related to the message sender, and therefore, could only take a third-person perspective. Although it could help test how socio-technological metrics impact message interpretation and impression formation without being confounded by relational factors (Bazarova, 2012), it limits its generalizability within non-relational contexts, as prior relational basis might interact with factors examined in this study and lead to different interpretations and relational outcomes (Prager, 1995).

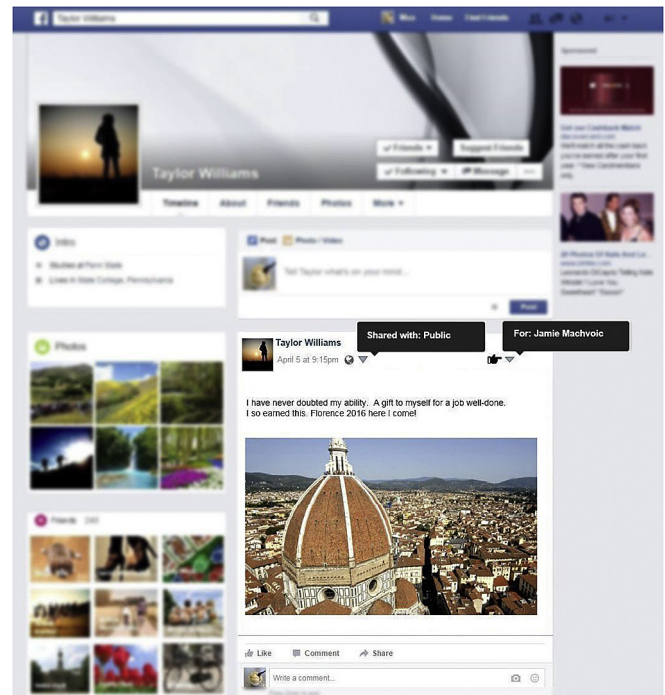
Second, by introducing Facebook feature that does not exist, participants were armed with an omniscient perspective. However, in real life, individuals who do not belong to message sender's "close friends" group, as we operationalized in our "low publicness" condition, are not supposed to see the post set only visible to "close friends." Therefore, rather than investigating how it feels seeing yourself being one of the limited people who have access to a piece of personal information, the current operationalization asked participants to interpret such a behavior of privacy management without relational basis. It still holds its external validity in the case when individuals find out from other sources such as other interpersonal communication channels that their Facebook friends post something behind them, which could happen. Depending on the relational basis of the perceivers with the message sender and their expectations, perceivers might experience from indifference to ostracism. However, under a non-relational context in the current study, we expect it to provide an objective opinion on the very behavior of privacy management. In this way, the conclusions drawn from this study should be generalized with caution.

8. Conclusion

Publicness of a message is more associated with a perception of impression management goal and less intimacy while directedness of a message is more associated with a perception of relational goal in the context of SNS. Publicness and directedness influence impression formation more when the disclosure is about the negative aspect of oneself, as negative self-disclosure is more restrictive in terms of communication context. Although public intimacy has been found as inappropriate, we found that having public negative self-disclosure directed to someone could make it

more desirable as it provides extra interpersonal explanations and therefore excuses the inappropriateness of the message sender. However, directedness, given its interpersonal nature, implies exclusiveness, and from the third-person perspective, too much exclusiveness might not be desirable given the sender has already created an exclusive context with other strategies.

Appendix A



A Facebook profile for the manipulation of directed message of high publicness.

References

- Altman, I., & Taylor, D. (1973). *Social penetration: The development of interpersonal relationships*. New York, NY: Holt, Rinehart and Winston.
- Archer, R. L., & Berg, J. H. (1978). Disclosure reciprocity and its limits: A reactance analysis. *Journal of Experimental Social Psychology*, 14(6), 527–540. [http://dx.doi.org/10.1016/0022-1031\(78\)90047-1](http://dx.doi.org/10.1016/0022-1031(78)90047-1).
- Archer, R. L., & Cook, C. E. (1986). Personalistic self-disclosure and attraction: Basis for relationship or scarce resource. *Social Psychology Quarterly*, 49(3), 268–272.
- Baron, R. A. (1989). Impression management by applicants during employment interviews: The "too much of a good thing" effect. In R. W. Eder, & G. R. Ferris (Eds.), *The employment interview: Theory, research, and practice* (pp. 204–215). Thousand Oaks, CA: Sage Publications, Inc.
- Bazarova, N. N. (2012). Public intimacy: Disclosure interpretation and social judgments on Facebook. *Journal of Communication*, 62(5), 815–832. <http://dx.doi.org/10.1111/j.1460-2466.2012.01664.x>.
- Bazarova, N. N., & Choi, Y. H. (2014). Self-disclosure in social media: Extending the functional approach to disclosure motivations and characteristics on social network sites. *Journal of Communication*, 64(4), 635–657. <http://dx.doi.org/10.1111/jcom.12106>.
- Berg, J. H., & Archer, R. L. (1978). *Disclosure or concern: A second look at liking for the norm breaker*. Unpublished manuscript, University of Texas at Austin.
- Bernstein, M. S., Bakshy, E., Burke, M., & Karrer, B. (2013, April). Quantifying the invisible audience in social networks. In *Proceedings of the SIGCHI conference on human factors in computing systems* (pp. 21–30). ACM. <http://dx.doi.org/10.1145/2470654.2470658>.
- Boyd, D. M., & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13(1), 210–230. <http://dx.doi.org/10.1111/j.1083-6101.2007.00393.x>.
- Brock, T. C. (1968). Implications of commodity theory for value change. *Psychological*

- Foundations of Attitudes*, 1, 243–275.
- Brunswick, E. (1956). *Perception and the representative design of psychological experiments*. Berkeley: University of California Press.
- Burgoon, J. K., & Hale, J. L. (1984). The fundamental topoi of relational communication. *Communication Monographs*, 51(3), 193–214. <http://dx.doi.org/10.1080/03637758409390195>.
- Burgoon, J. K., Manusov, V., Mineo, P., & Hale, J. L. (1985). Effects of gaze on hiring, credibility, attraction and relational message interpretation. *Journal of Nonverbal Behavior*, 9(3), 133–146. <http://dx.doi.org/10.1007/BF01000735>.
- Burgoon, J. K., & Newton, D. A. (1991). Applying a social meaning model to relational message interpretations of conversational involvement: Comparing observer and participant perspectives. *Southern Journal of Communication*, 56(2), 96–113. <http://dx.doi.org/10.1080/10417949109372822>.
- Burleson, B. R. (2010). The nature of interpersonal communication: A message-centered approach. In C. R. Berger, M. E. Roloff, & D. R. Roskos-Ewoldsen (Eds.), *Handbook of communication science* (pp. 145–163). Los Angeles, CA: Sage.
- Carr, C. T., & Walther, J. B. (2014). Increasing attributional certainty via social media: Learning about others one bit at a time. *Journal of Computer-Mediated Communication*, 19(4), 922–937. <http://dx.doi.org/10.1111/jcc4.12072>.
- Caughlin, J. P., Scott, A. M., Miller, L. E., & Hefner, V. (2009). Putative secrets: When information is supposedly a secret. *Journal of Social and Personal Relationships*, 26(5), 713–743. <http://dx.doi.org/10.1177/0265407509347928>.
- Davis, J. L., & Jurgenson, N. (2014). Context collapse: Theorizing context collusions and collisions. *Information, Communication & Society*, 17(4), 476–485. <http://dx.doi.org/10.1080/1369118X.2014.888458>.
- Dillard, J. P., Segrin, C., & Harden, J. M. (1989). Primary and secondary goals in the production of interpersonal influence messages. *Communications Monographs*, 56(1), 19–38. <http://dx.doi.org/10.1080/03637758909390247>.
- Duggan, M., Ellison, N. B., Lampe, C., Lenhart, A., & Madden, M. (2015). *Social media update 2014*. Pew Research Center, 9. Retrieved from: http://www.foothillspresbytery.org/wp-content/uploads/sites/175/2015/07/Social-Media-Site-Usage-2014_-Pew-Research-Centers-Internet-American-Life-Project.pdf.
- Edwards, A., & Harris, C. J. (2016). To tweet or 'subtweet': Impacts of social networking post directness and valence on interpersonal impressions. *Computers in Human Behavior*, 63, 304–310.
- Edwards, C., Spence, P. R., Gentile, C. J., Edwards, A., & Edwards, A. (2013). How much Klout do you have... A test of system generated cues on source credibility. *Computers in Human Behavior*, 29(5), A12–A16.
- Feldman, J. M. (1981). Beyond attribution theory: Cognitive processes in performance appraisal. *Journal of Applied Psychology*, 66(2), 127–148. <http://dx.doi.org/10.1037/0021-9010.66.2.127>.
- Fiedler, K., & Schenck, W. (2011). Spontaneous inferences from pictorially presented behaviors. *Personality and Social Psychology Bulletin*, 27(11), 1533–1546.
- Gilmore, D. C., & Ferris, G. R. (1989). The effects of applicant impression management tactics on interviewer judgments. *Journal of Management*, 15(4), 557–564.
- Goffman, E. (1959). *The presentation of self in everyday life*. New York: Anchor Books.
- Gosling, S. D., Ko, S. J., Mannarelli, T., & Morris, M. E. (2002). A room with a cue: Personality judgments based on offices and bedrooms. *Journal of Personality and Social Psychology*, 82(3), 379–398. <http://dx.doi.org/10.1037/0022-3514.82.3.379>.
- Graham, S. (1995). Implicit theories as conceptualized by an attribution researcher. *Psychological Inquiry*, 6(4), 294–297. http://dx.doi.org/10.1207/s15327965pli0604_4.
- Hancock, J. T., Thom-Santelli, J., & Ritchie, T. (2004). Deception and design: The impact of communication technology on lying behavior. In *Proceedings of the SIGCHI conference on Human factors in computing systems* (pp. 129–134). ACM.
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford Press.
- Heider, F. (1958). *The psychology of interpersonal relations*. New York: John Wiley & Sons.
- Hewstone, M. (1990). The 'ultimate attribution error'? A review of the literature on intergroup causal attribution. *European Journal of Social Psychology*, 20(4), 311–335. <http://dx.doi.org/10.1002/ejsp.2420200404>.
- Hogan, B. (2010). The presentation of self in the age of social media: Distinguishing performances and exhibitions online. *Bulletin of Science, Technology & Society*, 30(6), 377–386. <http://dx.doi.org/10.1177/0270467610385893>.
- Jiang, L., Bazarova, N. N., & Hancock, J. T. (2011). The disclosure–intimacy link in computer-mediated communication: An attributional extension of the hyperpersonal model. *Human Communication Research*, 37(1), 58–77. <http://dx.doi.org/10.1111/j.1468-2958.2010.01393.x>.
- Jones, E. E., & Archer, R. L. (1976). Are there special effects of personalistic self-disclosure? *Journal of Experimental Social Psychology*, 12, 180–193.
- Jones, E. E., & Davis, K. E. (1965). From acts to dispositions the attribution process in person perception. *Advances in Experimental Social Psychology*, 2, 219–266. [http://dx.doi.org/10.1016/S0065-2601\(08\)60107-0](http://dx.doi.org/10.1016/S0065-2601(08)60107-0).
- Kashian, N., Jang, J. W., Shin, S. Y., Dai, Y., & Walther, J. B. (2017). Self-disclosure and liking in computer-mediated communication. *Computers in Human Behavior*, 71, 275–283. <http://dx.doi.org/10.1016/j.chb.2017.01.041>.
- Kawada, C. L., Oettingen, G., Gollwitzer, P. M., & Bargh, J. A. (2004). The projection of implicit and explicit goals. *Journal of Personality and Social Psychology*, 86(4), 545–559.
- Kelley, H. H. (1972). *Causal schemata and the attribution process*. New York: General Learning Press.
- Kelley, H. H. (1973). The processes of causal attribution. *American Psychologist*, 28(2), 107–128. <http://dx.doi.org/10.1037/h0034225>.
- Kim, Y. C., & Jung, J. Y. (2016). SNS dependency and interpersonal storytelling: An extension of media system dependency theory. *New Media & Society*, 1, 1–18. <http://dx.doi.org/10.1177/1461444816663661>.
- Krämer, N. C., Feurstein, M., Kluck, J. P., Meier, Y., Rother, M., & Winter, S. (2017). Beware of selfies: The impact of photo type on impression formation based on social networking profiles. *Frontiers in Psychology*, 8, 1–14.
- Krämer, N. C., & Winter, S. (2008). Impression management 2.0: The relationship of self-esteem, extraversion, self-efficacy, and self-presentation within social networking sites. *Journal of Media Psychology*, 20(3), 106–116. <http://dx.doi.org/10.1027/1864-1105.20.3.106>.
- Ladkin, A., & Buhalis, D. (2016). Online and social media recruitment: Hospitality employer and prospective employee considerations. *International Journal of Contemporary Hospitality Management*, 28(2), 327–345. <http://dx.doi.org/10.1108/IJCHM-05-2014-0218>.
- Leary, M. R., & Kowalski, R. M. (1990). Impression management: A literature review and two-component model. *Psychological Bulletin*, 107(1), 34–47. <http://dx.doi.org/10.1037/0033-2909.107.1.34>.
- Lynn, M. (1991). Scarcity effects on value: A quantitative review of the commodity theory literature. *Psychology & Marketing*, 8(1), 43–57. <http://dx.doi.org/10.1002/mar.4220080105>.
- Marcus, B., Machilek, F., & Schutz, A. (2006). Personality in cyberspace: Personal Web sites as media for personality expressions and impressions. *Journal of Personality and Social Psychology*, 90(6), 1014–1031. <http://dx.doi.org/10.1037/0022-3514.90.6.1014>.
- Marder, B., Slade, E., Houghton, D., & Archer-Brown, C. (2016). "I like them, but won't 'like' them": An examination of impression management associated with visible political party affiliation on Facebook. *Computers in Human Behavior*, 61, 280–287.
- Marwick, A. E. (2011). I tweet honestly, I tweet passionately: Twitter users, context collapse, and the imagined audience. *New Media & Society*, 13(1), 114–133. <http://dx.doi.org/10.1177/1461444810365313>.
- McCroskey, J. C., & McCain, T. A. (1974). The measurement of interpersonal attraction. *Speech Monographs*, 41(3), 261–266. <http://dx.doi.org/10.1080/03637757409375845>.
- McMahan, E. M. (1976). Nonverbal communication as a function of attribution in impression formation. *Communications Monographs*, 43(4), 287–294. <http://dx.doi.org/10.1080/03637757609375939>.
- Newman, H. (1981). Communication within ongoing intimate relationships: An attributional perspective. *Personality and Social Psychology Bulletin*, 7(1), 59–70. <http://dx.doi.org/10.1177/014616728171010>.
- Oeldorf-Hirsch, A., & Sundar, S. S. (2015). Posting, commenting, and tagging: Effects of sharing news stories on Facebook. *Computers in Human Behavior*, 44, 240–249. <http://dx.doi.org/10.1016/j.chb.2014.11.024>.
- Oh, H. J., & LaRose, R. (2016). Impression management concerns and support-seeking behavior on social networking sites. *Computers in Human Behavior*, 57, 38–47. <http://dx.doi.org/10.1016/j.chb.2015.12.005>.
- Orrego, V. O., Smith, S. W., Mitchell, M. M., Johnson, A. J., Yun, K. A., & Greenberg, B. (2000). Disclosure and privacy issues on television talk shows. In S. Petronio (Ed.), *Balancing the secrets of private disclosures* (pp. 249–259). Mahwah, NJ: Erlbaum.
- Pandey, J., & Singh, A. K. (1986). Attribution and evaluation of manipulative social behavior. *The Journal of Social Psychology*, 126(6), 735–744. <http://dx.doi.org/10.1080/00224545.1986.9713655>.
- Petty, R. E., & Mirels, H. L. (1981). Intimacy and scarcity of self-disclosure: Effects on interpersonal attraction for males and females. *Personality and Social Psychology Bulletin*, 7(3), 493–503. <http://dx.doi.org/10.1177/014616728173020>.
- Prager, K. J. (1995). *The psychology of intimacy*. New York, NY: Guilford Press.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40, 879–891. <http://dx.doi.org/10.3758/BRM.40.3.879>.
- Priest, P. J. (1995). *Public intimacies: Talk show participants and tell-all TV*. Cresskill, NJ: Hampton Press.
- Rauthmann, J. F., & Kolar, G. P. (2013). The perceived attractiveness and traits of the Dark Triad: Narcissists are perceived as hot, Machiavellians and psychopaths not. *Personality and Individual Differences*, 54(5), 582–586. <http://dx.doi.org/10.1016/j.paid.2012.11.005>.
- Reeder, G. D., & Trafimow, D. (2005). Attributing motives to other people. In B. F. Malle, & S. D. Hodges (Eds.), *Other minds: How humans bridge the divide between self and others* (pp. 106–123). New York, NY: Guilford Press.
- Richey, M., Ravishankar, M. N., & Coupland, C. (2016). Exploring situationally inappropriate social media posts: An impression management perspective. *Information Technology & People*, 29(3), 597–617.
- Rosenberg, J., & Egbert, N. (2011). Online impression management: Personality traits and concerns for secondary goals as predictors of self-presentation tactics on Facebook. *Journal of Computer-Mediated Communication*, 17(1), 1–18. <http://dx.doi.org/10.1111/j.1083-6101.2011.01560.x>.
- Ross, L. D. (1977). The intuitive psychologist and his shortcomings: Distortions in the attribution process. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 10, pp. 173–220). New York: Academic Press.
- Rubin, Z. (1975). Disclosing oneself to a stranger: Reciprocity and its limits. *Journal of Experimental Social Psychology*, 11(3), 233–260. [http://dx.doi.org/10.1016/S0022-0311\(75\)80025-4](http://dx.doi.org/10.1016/S0022-0311(75)80025-4).
- Schau, H. J., & Gilly, M. C. (2003). We are what we post? Self-presentation in personal web space. *Journal of Consumer Research*, 30(3), 385–404. <http://dx.doi.org/10.1086/378616>.
- Seibold, D. R., & Spitzberg, B. H. (1982). Attribution theory and research: Review and

- implications for communication. *Progress in Communication Sciences*, 31, 85–125.
- Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods*, 7, 422–445. <http://dx.doi.org.ezproxy.library.yorku.ca/10.1037/1082-989X.7.4.422>.
- Sundar, S. S. (2008). The MAIN model: A heuristic approach to understanding technology effects on credibility. In M. J. Metzger, & A. J. Flanagin (Eds.), *Digital media, youth, and credibility* (pp. 73–100). Cambridge, MA: The MIT Press. <http://dx.doi.org/10.1162/dmal.9780262562324.073>.
- Tetlock, P. E. (1985). Accountability: A social check on the fundamental attribution error. *Social Psychology Quarterly*, 227–236. <http://dx.doi.org/10.2307/3033683>.
- 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. <http://dx.doi.org/10.1111/j.1083-6101.2008.00409.x>.
- Trope, Y., & Gaunt, R. (2000). Processing alternative explanations of behavior: Correction or integration? *Journal of Personality and Social Psychology*, 79, 344–354.
- Tseëlon, E. (1992). Is the presented self sincere? Goffman, impression management and the postmodern self. *Theory, Culture & Society*, 9(2), 115–128. <http://dx.doi.org/10.1177/026327692009002006>.
- Utz, S. (2015). The function of self-disclosure on social network sites: Not only intimate, but also positive and entertaining self-disclosures increase the feeling of connection. *Computers in Human Behavior*, 45, 1–10. <http://dx.doi.org/10.1016/j.chb.2014.11.076>.
- Vazire, S., & Gosling, S. D. (2004). e-Perceptions: Personality impressions based on personal Websites. *Journal of Personality and Social Psychology*, 87(1), 123–132. <http://dx.doi.org/10.1037/0022-3514.87.1.123>.
- Vitak, J. (2012). The impact of context collapse and privacy on social network site disclosures. *Journal of Broadcasting & Electronic Media*, 56(4), 451–470. <http://dx.doi.org/10.1080/08838151.2012.732140>.
- Vitak, J., & Ellison, N. B. (2013). 'There's a network out there you might as well tap': Exploring the benefits of and barriers to exchanging informational and support-based resources on Facebook. *New Media & Society*, 15(2). <http://dx.doi.org/10.1177/1461444812451566>.
- Vonk, R. (1998). The slime effect: Suspicion and dislike of likeable behavior toward superiors. *Journal of Personality and Social Psychology*, 74(4), 849–864.
- Walther, J. B. (1992). Interpersonal effects in computer-mediated interaction: a relational perspective. *Communication Research*, 19(1), 52–90.
- Walther, J. B. (1993). Impression development in computer-mediated interaction. *Western Journal of Communication*, 57(4), 381–398.
- 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. <http://dx.doi.org/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. <http://dx.doi.org/10.1111/j.1468-2958.2007.00312.x>.
- Wayne, S. J., & Liden, R. C. (1995). Effects of impression management on performance ratings: A longitudinal study. *Academy of Management Journal*, 38(1), 232–260.
- Wohn, D. Y., Lampe, C., Vitak, J., & Ellison, N. B. (2011). Coordinating the ordinary: Social information uses of Facebook by adults. In *Proceedings of the 2011 iConference* (pp. 340–347). ACM. <http://dx.doi.org/10.1145/1940761.1940808>.