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That tagging was annoying: An extension of expectancy violation theory to impression management on social network sites



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ABSTRACT

Built on expectancy violation theory, this study investigated how individuals respond to face-threatening information (FTI) on Facebook. We compared how external contingencies of self-worth (CSW; staking self-worth on others' evaluations) influenced negative affect and remediation between publicly and privately exchanged FTI. Participants were exposed to two putative pieces of FTI concerning their academic performance and morality from an acquaintance provided either publicly or privately. Results (N=204) show that external CSW only predicted negative affect in the public condition, and negative affect mediated the impact of external CSW on remediation only when FTI concerning morality was public. Our findings suggest that impression management online is a function of self-esteem, the subject, and publicness of FTI.

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1. Introduction

Humans desire to be perceived positively and maintain the public image they claim for themselves. However, we often receive information that challenges our public image (hereafter facethreatening information, or FTI). As social network sites (SNSs) become a major platform for daily communication, a growing number of FTI is observed on SNSs, usually in the form of criticism, rejection, and harassment (Brody & Peña, 2013; Chen, 2015; Tokunaga, 2010; Wohn & Spottswood, 2016). FTI suggests that the targets are devalued as a friend and excluded from their social groups (Baumeister & Leary, 1995; Leary, Tambor, Terdal, & Downs, 1995). In addition, as a form of other-generated information, FTI can shape third parties' impressions of the targets (Walther, Van Der Heide, Hamel, & Shulman, 2009; Walther, Van Der Heide, Kim, Westerman, & Tong, 2008) and influence their professional development (Bohnert & Ross, 2010; Drouin, O'Connor, Schmidt, & Miller, 2015; Lim, Vadrevu, Chan, & Basnyat, 2012). Further, unique technological affordances of SNSs - specifically high levels of visibility and permanence - can elevate the potential damage of FTI (Bazarova, 2012; Larsson, 2016). Therefore, effectively handling

FTI and managing one's public image on SNSs has become an important component of new media literacy (Davies, 2012).

Expectancy violation theory (EVT) provides a theoretical framework for understanding how we respond to FTI. EVT posits that we have developed expectations about how others should communicate with us, which is referred to as expectancy (Burgoon, 1993). Communication behavior that violates our expectancy triggers emotional arousal, which prompts us to interpret and evaluate the expectancy violation (Burgoon, 1993). We evaluate whether this violation is positive or negative, which affects our response to the violation (Burgoon, 1993). Based on prior research on Facebook use norms (Bryant & Marmo, 2012; McLaughlin & Vitak, 2012), FTI via SNSs can be conceptualized as a negative expectancy violation. Hence, FTI should cause negative affect and cue remediation — a type of impression management strategies intended to restore one's public image (Leary, 1995).

This extension of EVT to impression management assumes that FTI always predicts negative affect and remediation. However, EVT posits that the impact of expectancy violation depends on communicator characteristics (Burgoon, 1993). Prior research found that characteristics of FTI targets influence how they respond to FTI (Chen & Abedin, 2014; Cupach & Carson, 2002; Wohn & Spottswood, 2016). Specifically, Rui and Stefanone (2013) demonstrated that contingencies of self-worth (CSW), defined as domains

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on which individuals stake their self-worth (Crocker & Wolfe, 2001), explain impression management behavior on SNSs. They found that SNS users exhibiting high external CSW were motivated to restore their public image because these individuals stake their self-esteem on others' evaluations (Rui & Stefanone, 2013). In order to address this limitation, we propose that external CSW of FTI targets should first trigger emotional response —negative affect, which in turn motivates remediation behavior.

In addition, EVT posits that communication context influences our interpretation of the violation (Burgoon, 1993). One contextual characteristic relevant to this study is the *publicness* of FTI. FTI can be expressed *publicly* by explicitly linking the content to targets (i.e., tagging), or *privately* through direct messages between users. Public FTI likely draws unintended attention to targets, thereby heightening the level of face threat (Cupach & Carson, 2002; Leary, Britt, Cutlip, & Templeton, 1992), which may raise the level of negative affect that targets experience and influence their remediation. Hence, the proposed relationships between external CSW, negative affect, and remediation should vary across public and private FTI conditions.

We focus on FTI provided via Facebook, as Facebook is the most widely used SNS in the United States (Pew, 2017) and affords relationship management (Bryant & Marmo, 2012; Ellison, Steinfield, & Lampe, 2007, 2011). We start the literature review by outlining EVT. We establish connections between EVT and impression management by highlighting the social affordance of Facebook, followed by discussions of the two aforementioned limitations (i.e. individual difference, contextual factor). Next, we discuss how external CSW and negative affect may affect remediation on Facebook, and how publicness of FTI may change their relationships.

2. Literature review

2.1. EVT and impression management

EVT posits that expectancy, which refers to our anticipation of how others behave, is critical to human communication (Burgoon, 1993). We develop our expectancies about how others should communicate from multiple sources such as societal norms, stereotypes, personal experiences, and our unique knowledge of specific individuals' communication style (Burgoon, 1993; Burgoon, Birk, & Hall, 1991; Levine et al., 2000). Expectancy violation occurs when others' behavior deviates from our expectancy, which triggers emotional reaction and prompts us to understand the violation (Burgoon, 1993; Mendes, Blascovich, Hunter, & Lickel, 2007).

Depending on communicator characteristics, relational features, and communication context, individuals evaluate whether the violation is positive or negative (Burgoon, 1993). Violations better than our expectancy such as a surprise party are evaluated as positive violation and often cause positive communication outcome (Afifi & Metts, 1998; Burgoon, 1993). Conversely, violations worse than our expectancy such as FTI are perceived as negative violation and usually predict negative outcome (Burgoon, 1993).

EVT has been applied to a wide range of contexts, including nonverbal interaction (Burgoon & Hale, 1988; Burgoon & Jones, 1976), relational communication (Afifi & Metts, 1998; Bevan, 2003; Floyd & Voloudakis, 1999), and computer-mediated communication (Bevan, Ang, & Fearns, 2014; Kalman & Rafaeli, 2010; Ramirez & Wang, 2008). We argue that EVT can also be extended to impression management on Facebook, not only because of the general social norm that individuals should support each other's public image (Brown & Levinson, 1987; Goffman, 1967) but also as a result of the social affordance of Facebook.

2.1.1. Expectancy violation on facebook

Relationship management is a major function of SNSs including Facebook (boyd & Ellison, 2007). Facebook provides an additional channel to communicate with existing social contacts and is thus used to maintain existing relationships (Ellison, Steinfield, & Lampe, 2011, 2007; Lampe, Ellison, & Steinfield, 2006). In addition, by making user information available, Facebook enables individuals to reduce uncertainty about their newly formed connections (Ellison et al., 2011), which can facilitate their subsequent communication and develop those new relationships from weak ties to strong ties (Rui, Covert, Stefanone, & Mukherjee, 2015). This social affordance suggests that Facebook users are expected to support each other, as a strategy of nurturing existing relationships.

Facebook also allows for a range of activities that enable users to nurture existing relationships. For example, users are reminded of their Facebook friends' birthday and their Facebook anniversary with a particular contact. During natural disasters, Facebook users can check if their contacts in the affected areas are safe, and those contacts can also mark themselves safe on Facebook. Both activities can develop user relationships with their Facebook friends. Again, these activities suggest that supportive communication is expected and encouraged on Facebook.

Prior studies found several norms of Facebook use consistent with this expectancy for supportive communication, such as refraining from saying anything disrespectful about Facebook friends (Bryant & Marmo, 2012) and not gossiping Facebook friends (Tokunaga, 2011). Further, research reveals that Facebook users are expected to support their contacts' public image (Bryant & Marmo, 2012; McLaughlin & Vitak, 2012). Self-presentation is collaborative in nature, both offline (Goffman, 1967) and on SNSs (Litt et al., 2014). Thus, in order to maintain the public image they construct, individuals need their SNS contacts to support and even improve their public image (Litt et al., 2014). This expectancy was also highlighted in previous studies on Facebook use norm. For instance, before sharing posts involving particular Facebook friends, users are expected to consider the possible consequences of their posts on those friends (Bryant & Marmo, 2012; McLaughlin & Vitak, 2012)

However, FTI violates these norms as well as the expectancy for supportive communication between Facebook users. First, as a form of other-generated information, FTI is less subject to influences from the targets and thus perceived to exhibit more credibility (Walther & Parks, 2002). Therefore, by providing additional information about the targets which is perceived to be more credible, FTI might have a negative influence on how third parties perceive the targets (Walther et al., 2008, 2009). Especially when third parties have no prior interactions with the targets, the impact of FTI might be greater.

Second, FTI expresses that the targets are disliked and disrespected (Brown & Levinson, 1987). Thus, receiving FTI signals that the targets are devalued as a friend and excluded from their social group (Baumeister & Leary, 1995; Leary et al., 1995). This relational implication of FTI obviously violates the expectancy for supportive communication between Facebook users.

Furthermore, it is important to note that the damage of FTI to targets may extend to their career. Research established connections of positive public image with more likelihood to succeed in job interviews (Barrick, Shaffer, & DeGrassi, 2009). Online, third parties like potential employers collect information about job candidates by browsing their SNS profile and use this information to assist their hiring decisions (Drouin, Connor, Schmidt, & Miller, 2015). Hence, FTI suggesting targets are incapable or lack certain qualities can negatively affect their future professional development (Bohnert & Ross, 2010; Lim et al., 2012). Taken together, sending FTI on Facebook should be conceptualized as a negative

expectancy violation.

2.1.2. Extending EVT to impression management on facebook

EVT posits that expectancy violation triggers targets' emotional reaction, which affects their response to the violation (Burgoon, 1993), such as how targets make attribution of the violation (Kernahan, Bartholow, & Bettencourt, 2000) and evaluate the violator (Burgoon & Hale, 1988). Consistent with this argument, prior research demonstrated that FTI triggers a variety of negative affect such as embarrassment (Miller, 1992), nervousness (Miller, 1986), and anxiety (Leary, 1983). Further, Chen (2015) conducted an experiment in which participants received FTI from putative SNS users. Results revealed that FTI triggered negative affect of participants, and negative affect mediated the impact of FTI on the receiver's retaliatory responses (Chen, 2015).

This extension of EVT to impression management suggests that FTI always triggers negative affect and motivates remediation. However, EVT predicts that the impact of expectancy violation is moderated by various factors such as communicator characteristics (Burgoon, 1993). Specifically, FTI targets can have varied responses to similar messages, depending on their biological sex (Chen & Abedin, 2014), their perceptions of how severe FTI was (Cupach & Carson, 2002), and their perceived intentionality of sending FTI (Wohn & Spottswood, 2016). Thus, individual differences in FTI targets should account for additional variance in their response to FTI.

In addition, EVT predicts that communication context affects how people interpret and evaluate the violation (Burgoon, 1993). One contextual factor relevant to this study is the publicness of FTI. Facebook allows two major channels of delivering messages, which vary in their degree of visibility (Bazarova, 2012). Users can provide FTI through public posts like status updates or being tagged—or linked—to publicly accessible photos or posts. Alternatively, FTI can also be exchanged privately through directly messaging clients within Facebook.

Offline research found that public FTI is more face threatening because it draws unwanted attention to the targets (Cupach & Carson, 2002; Leary et al., 1992; Tracy, Van Dusen, & Robinson, 1987). Similar findings are replicated on Facebook. Oh and LaRose (2016) found that public support-seeking channels like Facebook status prompted individuals to carefully manage their public impression while seeking social support, which suggests that the public nature of Facebook status may heighten users' selfpresentational concern. Likewise, Bazarova, Taft, Choi, and Cosley (2013) found that individuals' self-presentational concern increased their use of positive emotion words when sharing Facebook statuses, compared to private messages. Given that expressing positive emotions is expected on Facebook (Reinecke & Trepte, 2014; Waterloo, Baumgartmer, Peter, & Valkenburg, 2017), Bazarova et al. (2013) suggested that the high visibility of Facebook statuses elevated users' self-presentational concern, which prompted them to manage their public impressions by using positive emotion words.

These findings are closely related to the technological affordances of Facebook. Facebook interactions can exhibit high levels of visibility such as sharing photos, updating text-based statuses, and tagging particular users (Bazarova, 2012). As Facebook enables users to manage large personal networks, this high visibility can expose FTI targets to wider audiences. In addition, Facebook makes interactions therein permanently available (Larsson, 2016). Thus, unless public FTI is removed, the damage to the targets can be stored and have long-term impacts on their professional development. Therefore, high visibility and permanence of FTI provided via Facebook heightens the damage of FTI to the targets, and thereby should elevate the level of negative affect that targets experience

and increase their motivation for remediation. Next, we will address these two limitations and discuss how individual difference and communication context interact to predict remediation on Facebook.

2.2. CSW, remediation, and publicness

One factor indicating individual difference is CSW. Crocker and Wolfe (2001) defined CSW as the domains on which individuals stake their self-worth, which are generally categorized into two types: external and internal contingencies. External CSW refers to domains in which individual performance is essentially subject to outside evaluation such as others' approval and appearance, and internal CSW are those realms that depend on internal self-appraisals like virtue and God's love (Crocker & Wolfe, 2001; Crocker, 2002; Crocker, Luhtanen, Cooper, & Bouvrette, 2003). Note that CSW is a new conceptualization of self-esteem, which challenges the traditional contention that self-esteem is one's overall evaluations of self-worth and suggests that self-esteem can be based on specific domains (Crocker & Wolfe, 2001).

Prior research applied CSW to impression management behavior on SNSs. Stefanone, Lackaff, and Rosen (2011) found that individuals exhibiting high external CSW shared more personal photos. Rui and Stefanone (2013) found that external CSW exhibited a positive relationship with using remediation strategies to manage unwanted photos and posts from Facebook friends. These findings suggest that external CSW might be related to impression management because individual performance in those externally driven domains depends heavily on outside evaluation (Crocker. 2002). Thus, individuals exhibiting external CSW should be more concerned about how they are perceived by others (Crocker, 2002). Given that CSW is another conceptualization of self-esteem (Crocker & Wolfe, 2001), establishing connections between CSW and impression management supports Schlenker (1980), which posits that self-esteem management is an important drive of impression management.

As an extension of previous work (Rui & Stefanone, 2013; Stefanone et al., 2011), and following research highlighting the role of negative affect in individual response to FTI (Chen, 2015), we argue that FTI targets exhibiting high external CSW should report more negative affect, and negative affect should mediate the relationship between external CSW and remediation. Note that the impact of negative affect on remediation suggests that impression management functions as a strategy of emotion management (Leary, 1995). Thus, impression management might exhibit dual functions: self-esteem and emotion management.

However, as EVT suggests (Burgoon, 1993), communication context like FTI publicness may influence the proposed relationships between external CSW, negative affect, and remediation across publicly and privately provided FTI. First, individuals exhibiting high external CSW stake their self-esteem on outside evaluations and thereby are more concerned about how they are perceived by others (Rui & Stefanone, 2013). Thus, regardless of FTI publicness, high external CSW should lead to heightened negative affect. However, public FTI causes additional damage to targets. Consequently, although external CSW should predict negative affect in both public and private conditions, this relationship should be stronger when FTI is public.

H1. (a) External CSW is associated with negative affect for both public and private FTI, and (b) this relationship is stronger when FTI is public.

Second, as Rui and Stefanone (2013) found, external CSW exhibited a positive relationship with remediation. However, this relationship may only be significant when FTI is public because

increased attention should heighten the drive to restore one's image. In contrast, private FTI minimizes the damage due to limited exposure, so the drive to remediate is likely absent. Thus.

H2. The relationship between external CSW and remediation is limited to pubic FTI.

The limited exposure of private FTI averts the drive to restore one's public image, which makes the relationship between external CSW and remediation meaningful only in the case of public information. Thus, the proposed mediation relationship between external CSW and remediation via negative affect should only be meaningful when FTI is communicated publicly.

H3. The indirect effect of external CSW on remediation via negative affect is limited to public FTI.

3. Method

3.1. Sample

Participants were recruited from undergraduate Facebook users taking introductory communication courses at a large Northeastern University. Two hundred and four participants completed the study; 84 were male and their average age was about 20 years (M=20.01, SD=2.07). The majority were Caucasian (95), followed by Asian (74), African American (21), and Hispanic (8). Nearly 40% of participants were sophomores, followed by freshman (27.5%), juniors (22.1%), and seniors (10.8%).

3.2. Procedure

Participants were first asked to complete an online survey measuring external CSW, positive and negative affect. They were then asked to nominate an *acquaintance* from their Facebook network. Participants were told that an acquaintance is someone they know but they are not close to such as a casual friend. Next, a hypothetical scenario was presented which incorporated the name of the acquaintance indicated by participants. This name was automatically propagated into the scenario. The text of the scenario indicated that participants were either putatively tagged into a public face-threatening Facebook status, or received a private face-threatening Facebook message from this acquaintance. Participants were randomly assigned to either condition (private: 99; public: 105).

In order to control the effect of FTI subject and increase the generalizability of our findings, we tested two instances of FTI on each participant. The first concerned their *academic performance* because college students ranked their academic competence-based CSW high (Crocker et al., 2003). Participants were told that their nominated acquaintance criticized their class presentation on Facebook. The second instance of FTI concerned *moral behavior* because morality is another important CSW ranked high by college students (Crocker et al., 2003). Participants were told that their nominated acquaintance disclosed on Facebook that they were drunk and cursing in front of a kid.

A pilot test was conducted to assess the validity of these scenarios. Twenty three college students were asked to indicate how much the presented information would threaten their public image related to academic performance (M = 6.52, SD = 1.56) and morality (M = 5.30, SD = 1.47). Descriptive statistics demonstrated the validity of our scenarios.

Immediately after exposure to each message, participants were asked to report how they felt if they read the putative message on Facebook (i.e. positive vs. negative affect) and how they would respond in these situations. The order of messages was

randomized. All procedures were approved by Institutional Review Board. Fig. 1 shows the experiment procedure.

3.3. Measures

Two questions from Wellman and Wortley (1990) were used to evaluate the relationship between participants and their nominee: "This person is a ..." (1 = casual acquaintance, 7 = very good friend), and "How close are you with this person" (1 = very distant, 7 = very close). Reliability test yielded satisfactory results (r = 0.71, p < .001) and confirmed that participants nominated their acquaintance (M = 3.20, SD = 1.18).

Crocker et al. (2003)'s 35-item Likert scale that measures CSW includes seven domains on which college students stake their self-worth. Following CSW literature (Crocker & Wolfe, 2001; Crocker, 2002), we chose 14 items with the highest loading from the four externally driven domains (i.e. approval, appearance, competition, academic competence) to measure *external CSW* (M = 4.46, SD = 0.81, Cronbach's $\alpha = 0.81$).

Positive affect and negative affect were measured using Park and Crocker's (2008) scales. Positive affect included being happy, content, and pleasant, whereas negative affect included being frustrated, tense, and agitated. Table 1 presents results of the reliability tests and descriptive statistics of positive affect and negative affect. We then conducted paired-sample t-tests to compare participants' positive affect and negative affect before and after they were

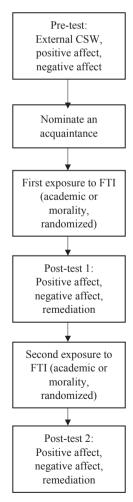


Fig. 1. The experiment procedure.

Table 1Results of the reliability tests and descriptive statistics of positive affect and negative affect.

		Cronbach's α	Mean	Standard deviation
Positive affect	Pre-exposure	.83	5.04	1.10
	Post academic performance-related FTI	.88	2.38	1.35
	Post morality-related FTI	.89	2.62	1.47
Negative affect	Pre-exposure	.85	2.34	1.27
	Post academic performance-related FTI	.89	4.62	1.64
	Post morality-related FTI	.92	4.10	1.81

exposed to the FTI. Results revealed that after participants were exposed to FTI questioning their academic performance, they reported less positive affect, t (203) = -23.98, p < .001, and more negative affect, t (203) = 15.51, p < .001. Likewise, after their exposure to morality-related FTI, they also reported less positive affect, t (203) = -20.44, p < .001, and more negative affect, t (203) = 11.10, p < .001.

Remediation was operationalized following Smock (2010), which categorized remediation strategies along two dimensions. While repudiative strategies focus on restoring one's public image by employing verbal messages to deny negative attributes associated with individuals, including defending one's innocence, apologies, finding excuses, and justifying one's behavior, subtractive strategies can also be employed like untagging oneself from undesirable photos (Smock, 2010).

In the *public* condition, participants were given three options: (1) ignore, (2) untag/delete the status, or (3) comment to defend themselves. While untagging is a subtractive strategy, commenting to defend oneself is repudiative. In the *private* condition, individuals cannot untag themselves, and deleting FTI does not restore their public image. Thus, only two choices were offered: (1) ignore, and (2) comment to defend themselves.

Remediation was dichotomized: 0 = no effort and 1 = engaged in remediation (i.e. repudiative and subtractive strategies). In total, 130 participants reported untagging, deleting or commenting as a response to academic competence-related FTI, whereas 70 chose to ignore the information. Similarly, 133 participants reported untagging, deleting or commenting to address morality-related FTI, and 71 ignored the information.

We also controlled for biological sex in our analyses because women tend to report more negative affect in face-threatening situations (Cupach & Carson, 2002). *Biological sex* was dummy coded as a dichotomous variable (0 = male, 1 = female).

3.4. Data analysis strategy

We conducted structural equation modeling (SEM) by using the Lavaan package in R 3.1.1. We first assessed the *measurement* model by conducting goodness of fit tests. A good model fit is indicated by a nonsignificant χ^2 goodness-of-fit statistic, χ^2 /df less than 5, root mean square error of approximation (RMSEA) less than .06, comparative fit index (CFI) greater than .95, and standardized root mean squared residual (SRMR) less than .08 (Hu & Bentler, 1999).

Next, in order to test H1 and H2, *path analysis* with multiple group comparisons was performed to compare the statistical significance of the relationships between external CSW, negative affect, and remediation (Beaujean, 2014). We split our sample based on FTI publicness (0 = private Facebook message, 1 = public status tagging). Fig. 2 presents the SEM model we analyzed.

Additionally, in order to test H3, we employed the statistical program PROCESS (Hayes, 2013) to examine the *mediation* relationship in each subsample with 5000 bootstrapped samples. The mediation is indicated by 95% confidence interval (CI). A significant mediation is evident if zero is excluded from the 95% CI. We then

compared results of mediation analysis to conclude whether there is significant difference between two conditions. The same analyses in steps 2 and 3 were repeated for FTI concerning academic performance and morality respectively.

4. Results

Table 2 presents descriptive statistics and bivariate correlations between all continuous variables in our study. Most of our model indices show that our measurement model exhibited a good fit, $\chi^2/df=1.46$, p<.001, CFI = 0.97, RMSEA = 0.048, SRMR = 0.059. Although the χ^2 goodness-of-fit statistic was significant, this analysis is sensitive to sample size and thus not recommended as the sole basis for model evaluation (Vandenberg, 2006).

4.1. Academic performance

Our model predicting remediating academic performance-related FTI demonstrated a good model fit, $\chi^2/\mathrm{df}=1.16$, p<.32, CFI = 0.99, RMSEA = 0.04. H3 predicted a stronger relationship between external CSW and negative affect for public FTI opposed to private FTI (H1b), although the relationship should be significant in both conditions (H1a). When FTI was private the relationship between external CSW and negative affect was not significant (p>.05), but the same relationship was significant when FTI was public ($\beta=0.35$, p<.001). Therefore, H1b was supported but H1a was rejected.

H2 hypothesized that external CSW exhibited a significant relationship with remediation only when FTI was publicly delivered. As expected, external CSW significantly predicted remediation when FTI was public ($\beta=0.41,\,p<.004$), but no significant relationship was observed for private FTI. H2 was supported.

H3 hypothesized that the indirect effect of external CSW on remediation via negative affect was only significant for public FTI. Results of PROCESS show that the mediation relationship between external CSW and remediation via negative affect was not significant in either the public (B = 0.10, 95% CI: [-.10, .37]) or private condition (B = 0.12, 95% CI: [-.09, .42]). Therefore, H3 was rejected.

4.2. Morality

The model predicting remediating morality-related FTI demonstrated good model fit, $\chi^2/\mathrm{df}=0.47$, p<.63, CFI = 1, RMSEA = 0. External CSW significantly predicted negative affect only when FTI was publicly delivered ($\beta=0.19$, p<.05). This result replicated the findings of academic performance-related FTI, supporting H1b but rejecting H1a.

Next, our findings for the relationship between external CSW and remediation were opposite to H2. When FTI was public, the relationship between external CSW and remediation was not significant. However, the same relationship was significant when FTI was private ($\beta = 0.26$, p < .05). H2 was thus rejected.

In addition, results of PROCESS show that the mediation relationship between external CSW and remediation via negative affect

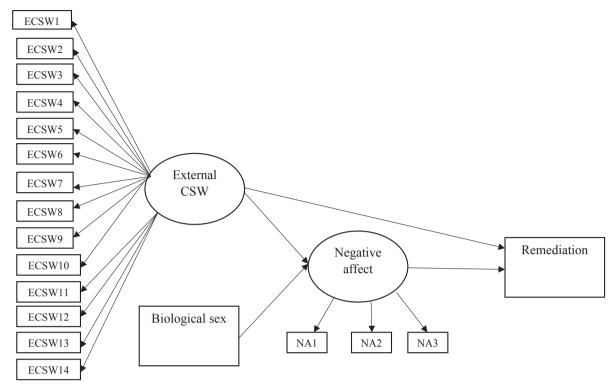


Fig. 2. The structural equation model with multiple group comparison predicting remediation.

 Table 2

 Descriptive statistics and zero-order correlations for variables; means (standard deviations) presented along the diagonal.

	External CSW	Negative affect (academic performance)	Negative affect (morality)
External CSW Negative affect (academic performance) Negative affect (morality)	4.46 (.81)	.24** 4.62 (1.64)	.17* .63** 4.10 (1.81)

Note: p < .01, p < .05.

was not significant when FTI was privately exchanged (B=0.08, 95% CI: [-.03, .29]). Yet a significant mediation effect was found when FTI was public (B=0.18, 95% CI: [.01, .52]). Therefore, H3 was supported. Table 3 presents results of both models.

5. Discussion

Other-generated information available via Facebook can impact the targets' public image and affect their relational and professional goals (Drouin et al., 2015; Leary et al., 1995; Walther et al., 2008, 2009). The technological affordances of Facebook, specifically high visibility and permanence, heighten the potential damage of FTI to the targets (Bazarova, 2012; Larsson, 2016). Thus, actively managing FTI on SNSs has become a critical component of new

media literacy (Davies, 2012). We draw upon EVT to compare how Facebook users respond to FTI delivered publicly and privately. Our results highlight the role that FTI publicness plays in remediation. As one of the first attempts of extending EVT to impression management on SNSs, this study reveals how individual differences interact with communication context to predict the impact of expectancy violation on impression management. Results suggest how new technology shapes expectancy and provide implications about the mechanism of impression management on SNSs.

5.1. Major findings

First, external CSW predicted negative affect only for public FTI. Private information minimized the potential fallout from broad

 Table 3

 Results of the path model predicting responses to Academic performance- and morality-related FTI between public and private conditions.

	Academic performance		Moral behavior	
	Private message	Public status tagging	Private message	Public status tagging
External CSW → negative affect	.10	.35***	.13	.19*
Sex → negative affect	$.19^{+}$.19*	.07	.18+
External CSW → Remediation	.14	.41**	.26*	22
Negative affect → Remediation	.52***	.13	.29*	.39***
Mediation	.10 [10, .37]	.12 [09, .42]	.08 [03, .29]	.18 [.01, .52]

Note: ***p < .001, **p < .01, *p < .05, *p < .1.Sex: male = 0, female = 1.

audience exposure and consequently the level of negative affect that targets experience. As long as FTI is delivered in private, Facebook users staking their self-worth on outside evaluations may simply ignore it because their embarrassment is only visible to the FTI sender.

Next, we predicted the impact of external CSW on remediation was only significant for public FTI. Although this prediction was confirmed for FTI concerning academic performance, the opposite pattern was found for morality-related FTI. One possible reason is that the moral behavior we described in the hypothetical scenario was public intoxication and swearing in front of children. Research shows how individuals present themselves on SNSs can affect how third parties evaluate them as job candidates (Bohnert & Ross, 2010; Drouin et al., 2015). As the mean age of our sample was below 21 years old, this putative behavior involves underage drinking for many participants. Given this serious consequence, when this particular FTI is publicly delivered, targets may engage in remediation strategies regardless of their level of external CSW. In contrast, when it is private, targets are not concerned that third parties like future employers would find this information. Thus, only SNS users staking their self-worth on externally driven domains may attempt to defend themselves because their self-esteem heavily relies on how they are perceived by others (Crocker, 2002).

This speculation suggests that the perceived severity of consequences caused by FTI may moderate the impact of external CSW on remediation. Additionally, our finding suggests that the perceived severity of consequence may shape the purpose of remediation. Targets may engage in remediation for damage control in the face of severe consequences. Impression management here serves instrumental purposes. However, when targets perceive less serious consequences, their remediation may be driven by the need to manage their self-esteem.

However, perceived consequence severity may not explain whether or not information is interpreted as face threatening. One interesting finding from our post-hoc analysis is that participants reported more negative affect (t (203) = 5.03, p < .001) and less positive affect (t (203) = -2.96, p < .01) when FTI concerned academic performance, opposed to moral behavior. Although negative affect may not be the best operationalization of a construct reflecting the extent to which FTI is perceived as face threatening, one possible explanation is that academic performance-related FTI was putatively offered by participants' peers, rather than more authoritative sources like professors. Thus, targets likely dismiss the legitimacy of academic performance-related FTI and respond with heightened negative affect. In addition, participants may have found the information about public intoxication entertaining, not face threatening. Research shows that drinking-related stories are usually perceived entertaining by college students, which is an important reason why drinking alcohol is prevalent on college campuses (Griffin, Bengry-Howell, Hackley, Mistral, & Szmigin, 2009; Workman, 2001). Thus, the entertainment component may inhibit participants from experiencing high levels of negative affect. Taken together, negative affect followed academic performancerelated FTI perhaps because targets questioned the legitimacy of FTI, whereas negative affect followed morality-related FTI perhaps because targets did not want senders to publicly share the information which could have an impact on their professional development.

Perhaps the most interesting finding is that the mediation relationship between external CSW and remediation via negative affect varies depending on the publicness and subject of FTI. When FTI concerned academic performance, the proposed mediation relationship was not significant in either condition. As Table 2 shows, negative affect did not predict remediation in the public condition, which explains why the proposed mediation

relationship was nonsignificant. Therefore, when academic performance-related FTI was publicly delivered, remediation was a direct outcome of external CSW. One possible explanation is that as argued earlier, the questionable legitimacy of academic performance-related FTI might elevate the level of negative affect that most participants reported. Thus, negative affect in this situation may exhibit low variances and so may not be able to predict variances in remediation.

When FTI concerned moral behavior, we found a full mediation between external CSW and remediation via negative affect only in the public condition. This finding supports Chen (2015) and suggests that remediation functions as a technique of emotion management (Leary, 1995). FTI targets exhibiting high levels of external CSW may experience more negative affect in response to this public morality-related FTI because their self-esteem depends on how they are evaluated by others (Crocker & Wolfe, 2001), especially when this evaluation can have real-life consequences such as affecting their professional development. Further, the entertaining component of drinking-related information may lower the extent of negative affect. Thus, compared to negative affect in the situation of academic performance-related FTI, negative affect in response to morality-related FTI might have more variances and thus could predict variances in remediation.

5.2. Theoretical implications

5.2.1. EVT

The present study provides important theoretical implications, which can develop scholarship on EVT, impression management on SNSs, and expectancy and SNSs. First, this study presents one of the first attempts that extend EVT to impression management on SNSs. By highlighting the role of external CSW in this process, our study challenges prior research on FTI via SNSs (e.g. Chen, 2015) and suggests that FTI may not lead to the same consequences. Instead, individual differences (i.e. external CSW) and communication context (i.e. FTI publicness) interact to predict how FTI targets respond to this information.

Second, prior EVT research focuses on violator characteristics (Burgoon & LePoire, 1993; Burgoon & Walther, 1990). Those studies found that violator characteristics such as physical attractiveness and communication style can impact how the violation is interpreted and moderate the effect of the violation on communication outcomes (Burgoon & LePoire, 1993; Burgoon & Walther, 1990). However, given that communication is a dynamic process shaped by both senders and receivers, it is important to consider characteristics of violation targets. Our finding supports previous research (Chen & Abedin, 2014; Cupach & Carson, 2002) and adds to the knowledge about individual differences on handling FTI. Further, our study suggests that the violator and the target may interact to predict individual responses to FTI. For example, if the violator is a friend of the target, external CSW may not impact negative affect or remediation because sending FTI violates friendship norms. In other words, no matter whether targets stake their self-esteem on outside evaluations, they should report heightened negative affect and increased motivation to remediate their public image. In contrast, if the violator is not close to the FTI target as what we specified in this study, the effect of external CSW may be highlighted.

5.2.2. Impression management on SNSs

In addition, our findings develop the extant scholarship on impression management on SNSs. Our findings extend previous research that connects external CSW and impression management on SNSs (Rui & Stefanone, 2013; Stefanone et al., 2011) and revealed that the impact of external CSW on remediation depends on many

factors. Specifically, external CSW predicted remediation for academic performance-related FTI but not morality-related FTI. This shows that restoring public image to manage self-esteem may be limited to instances where FTI threatens the target's public image but has minimal real-life consequences. If FTI could cause serious consequences such as hurting the target's professional development, remediation may happen regardless of individual differences. Hence, this finding suggests boundary limitations for the self-esteem function of impression management (Schlenker, 1980).

Next, we found a full mediation relationship between external CSW and remediation through negative affect for public moralityrelated FTI, but not for academic performance-related FTI. This reveals that impression management was a direct outcome of negative affect rather than external CSW. Hence, impression management functions as a technique of emotion management (Leary, 1995). Further, our findings also suggest boundary limitations for this emotional management function of impression management. Specifically, when negative affect is too low (i.e., privately delivered FTI), targets may not experience sufficient negative affect. When negative affect is too high and does not exhibit sufficient variances (i.e. public academic performancerelated FTI), remediation may function as self-esteem management. Only when FTI targets exhibit medium-level negative affect, negative affect may mediate the impact of external CSW on remediation and remediation functions as emotion management.

Moreover, these results highlight the role of FTI publicness in impression management. Previous research found that public communication channels could elevate the level of self-presentational concern and motivate more impression management behaviors (Bazarova et al., 2013; Cupach & Carson, 2002; Oh & LaRose, 2016; Tracy et al., 1987). Our findings suggest that public FTI may not automatically translate to heightened levels of face threat and increased drive for impression management. Instead, its impact might depend on many factors like the subject of FTI and the perceived severity of consequences of FTI.

5.2.3. Expectancy and SNSs

Furthermore, by establishing connections between EVT and handling FTI on SNSs for impression management purposes, we add to the knowledge of SNS use expectancy. Although previous research provides findings about SNS use norm and expectancy (Bryant & Marmo, 2012; McLaughlin & Vitak, 2012; Tokunaga, 2011), those studies seldom built their findings on theoretical foundations. Our results support these expectancies and suggest that they may be derived from the *social* affordance of Facebook. In addition, our study highlights that public FTI could increase the potential damage to the targets because of *technological* affordances of Facebook, specifically high visibility and permanence. These implications suggest that technological and social affordances might shape norms and expectancies of different SNS platforms, which provide important directions for future research, discussed later

5.3. Limitations

Although our study generates important implications, our findings must be interpreted with several caveats. First, we used a hypothetical scenario, which threatens the internal validity of our results. However, employing actual behavior to evaluate the transmission of FTI on SNSs is difficult. For example, asking participants to perform behaviors that violate moral rules and sharing those behaviors on Facebook is simultaneously unethical and infeasible. Future research focusing on other domains of CSW might make it more practical to incorporate and evaluate actual behavior.

Second, presenting FTI about specific Facebook friends from

acquaintances might exhibit low levels of ecological validity. As research found that college students believe it is inappropriate to post anything that might threaten their friends' public images (Bryant & Marmo, 2012; McLaughlin & Vitak, 2012), sharing FTI on Facebook especially by acquaintances could be low in ecological validity.

Third, we asked our participants to nominate an acquaintance. However, connecting simulated FTI with self-nominated acquaintances can lower the ecological validity of our experiment because the nominee may be unlikely to post the FTI. Additionally, participants may already have preconceptions of their nominee, which could affect how they responded to the FTI.

Next, our sample is comprised of college students who are heavy SNS users and take others' recognitions more seriously (Crocker et al., 2003). Therefore, caution should be used when generalizing our findings to other populations.

Moreover, as discussed earlier, our results demonstrate that how individuals respond to FTI depends on individual characteristics, relational factors, and the topic of the information. Therefore, many variables could influence our findings. Yet we did not measure or control these variables.

In addition, although our operationalization of remediation is built on empirical research (Smock, 2010), this operationalization is limited to individual-level strategies. As impression management is collaborative in nature (Litt et al., 2014), targets may restore their public image through cooperative strategies such as negotiating with the violator (Wohn & Spottswood, 2016). Besides, extreme strategies like removing the violator from Facebook might also be used.

Finally, a major limitation is our measures of affect. Specifically, we only measured the valence of affect (i.e. positive vs. negative), which is only one dimension of human emotion that influences our response (Lerner, Li, Valdesolo, & Kassam, 2015). For example, anger and sadness are both negative, but they are inherently different. These differences can trigger different cognitive and affective mechanisms, which can cause different responses (Lerner et al., 2015). Therefore, only measuring the valence of affect may be insufficient to explicate the mechanism by which emotions impact remediation via Facebook.

5.4. Future directions

This study suggests several directions for future research on expectancy, impression management, and SNSs. First, FTI exchanged in real life via SNSs may be more subtle. For example, research shows that context collapse might contribute to threatened public image on SNSs because SNS users have to present themselves to increasingly diverse networks across different audience segments which hold conflicting expectations (Marder, Joinson, Shankar, & Thirlaway, 2016; Rui & Stefanone, 2013). Therefore, future research on FTI via SNSs can employ context collapse (Marwick & boyd, 2010) and incorporate network diversity to assess how information may violate the expectancy of specific audience members and be perceived as face threatening.

Second, we controlled for the relationship between the violator and the target as acquaintance. Future research should compare how people respond to public and private FTI initiated by different violators. When FTI is generated by close friends, targets may respond with more negative affect and heightened motivation to remediate because sending FTI violates friendship norms, especially when it is public. However, if FTI is sent privately by close friends, targets may interpret FTI as attempts at humor and thus may be less likely to respond with negative affect. Moreover, how targets make attributions of the FTI may affect impression management. Attributions may moderate the impact of FTI on

impression management. Alternatively, attributions may mediate the effects of FTI publicness and the violator-target relationship on impression management. Results of these investigations can develop politeness theory, EVT, and attribution theory.

In addition, we tested negative affect as a composite following prior research (e.g. Chen, 2015). Future research would benefit by decomposing negative affect and examining which dimension(s) of negative affect is/are salient (e.g. anger, frustration, embarrassment, etc.) in combination with external CSW.

Finally, future research on SNSs and expectancy should explicitly measure EVT variables such as expectancy, norm, and violation valence. As argued earlier, social and technological affordances of Facebook might shape particular norms and user expectancies. Given the large variances in terms of social and technological affordances across different SNS platforms, future research should compare these differences and connect these affordances with user norm and expectancy.

6. Conclusion

This study investigated how Facebook users handle FTI generated by acquaintances to manage their public image. We found different dynamics by which external CSW influences negative affect and remediation between publicly and privately delivered FTI. Results presented herein add to the development of EVT, suggest the impact of SNS social and technological affordances on user expectancy, and reveal that impression management exhibits different functions depending on individual differences, FTI publicness, and its subject.

References

- Afifi, W. A., & Metts, S. (1998). Characteristics and consequences of expectation violations in close relationships. *Journal of Social and Personal Relationships*, 15, 365–392. https://doi.org/10.1177/0265407598153004.
- Barrick, M. R., Shaffer, J. A., & DeGrassi, S. W. (2009). What you see may not be what you get: Relationships among self-presentation tactics and ratings of interview and job performance. *Journal of Applied Psychology*, 94, 1394–1411. https://doi.org/10.1037/a0016532.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*, 497–529. https://doi.org/10.1037/0033-2909.117.3.497.
- Bazarova, N. N. (2012). Public intimacy: Disclosure interpretation and social judgments on Facebook. *Journal of Communication*, 62, 815–832. https://doi.org/10.1111/j.1460-2466.2012.01664.x.
- Bazarova, N., Taft, J., Choi, Y., & Cosley, D. (2013). Managing impressions and relationships on Facebook: Self-presentational and relational concerns revealed through the analysis of language style. *Journal of Language and Social Psychology*, 32, 121–141. https://doi.org/10.1177/0261927X12456384.
- Beaujean, A. A. (2014). Latent variable modeling using R: A step-by-step guide. New York, NY: Routledge.
- Bevan, J. L. (2003). Expectancy violation theory and sexual resistance in close, cross-sex relationships. Communication Monographs, 70, 68–82. https://doi.org/10.1080/715114662.
- Bevan, J. L., Ang, P. C., & Fearns, J. B. (2014). Being unfriended on Facebook: An application of Expectancy violation theory. *Computers in Human Behavior*, 33, 171–178. https://doi.org/10.1016/j.chb.2014.01.029.
- Bohnert, D., & Ross, W. (2010). The influence of social networking web sites on the evaluation of job candidates. CyberPsychology, Behavior, and Social Networking, 13, 341–347. https://doi.org/10.1089/cyber.2009.0193.
- boyd, d, & Ellison, N. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-mediated Communication*, 13, 210–230. https://doi.org/10.1111/j.1083-6101.2007.00393.x.
- Brody, N., & Peña, J. (2013). Face-threatening messages and attraction in social networking sites: Reconciling strategic self-presentation with negative online perceptions. In C. Cunningham (Ed.), Social networking and impression management: Self-presentation in the digital age (pp. 205–226) (Plymouth, UK).
- Brown, P., & Levinson, S. (1987). Politeness: Some universals in language usage. Cambridge: Cambridge University Press.
- Bryant, E., & Marmo, J. (2012). The rules of Facebook friendship: A two-stage examination of interaction rules in close, casual, and acquaintance friendships. Journal of Social and Personal Relationships, 29, 1013–1035. https://doi.org/10.1177/0265407512443616.
- Burgoon, J. K. (1993). Interpersonal expectations, expectancy violations, and emotional communication. *Journal of Language and Social Psychology*, 12, 30–48.

- https://doi.org/10.1177/0261927X93121003.
- Burgoon, M., Birk, T. S., & Hall, J. R. (1991). Compliance and satisfaction with physician-patient communication: An expectancy theory interpretation of gender differences. *Human Communication Research*, 18, 177–208. https:// doi.org/10.1111/j.1468-2958.1991.tb00543.x.
- Burgoon, J. K., & Hale, J. L. (1988). Nonverbal expectancy violations: Model elaboration and application to immediacy behaviors. *Communication Monographs*, 55, 58–79. https://doi.org/10.1080/03637758809376158.
- Burgoon, J. K., & Jones, S. B. (1976). Toward a theory of personal space expectations and their violations. *Human Communication Research*, 2, 131–146. https://doi.org/10.1111/i.1468-2958.1976.tb00706.x.
- Burgoon, J. K., & LePoire, B. A. (1993). Effects of communication expectancies, actual communication, and expectancy disconfirmation on evaluations of communicators and their communication behavior. *Human Communication Research*, 20, 67–96. https://doi.org/10.1111/j.1468-2958.1993.tb00316.x.
- Burgoon, J. K., & Walther, J. B. (1990). Nonverbal expectancies and the evaluative consequences of violations. *Human Communication Research*, 17, 232–265. https://doi.org/10.1111/i.1468-2958.1990.tb00232.x.
- Chen, G. M. (2015). Losing face on social media: Threats to positive face lead to an indirect effect on retaliatory aggression through negative affect. Communication Research, 42, 819–838. https://doi.org/10.1177/0093650213510937.
- Chen, G. M., & Abedin, Z. (2014). Exploring differences in how men and women respond to threats to positive face on social media. *Computers in Human Behavior*, 38, 118–126. https://doi.org/10.1016/j.chb.2014.05.029.
- Crocker, J. (2002). The costs of seeking self-esteem. Journal of Social Issues, 58, 597–615. https://doi.org/10.1111/1540-4560.00279.
- Crocker, J., Luhtanen, R., Cooper, M., & Bouvrette, A. (2003). Contingencies of self-worth in college students: Theory and measurement. *Journal of Personality and Social Psychology*, 85, 894–908. https://doi.org/10.1037/0022-3514.85.5.894.
- Crocker, J., & Wolfe, C. (2001). Contingencies of self-worth. Psychological Review, 108, 593–623. https://doi.org/10.1037//0033-295X.108.3.593.
- Cupach, W. R., & Carson, C. L. (2002). Characteristics and consequences of interpersonal complaints associated with perceived face threat. *Journal of Social and Personal Relationships*, 19, 443–462. https://doi.org/10.1177/0265407502019004047.
- Davies, J. (2012). Facework on Facebook as a new literacy practice. *Computers & Education*, 59, 19–29. https://doi.org/10.1016/j.compedu.2011.11.007.
- Drouin, M., Connor, K. W. O., Schmidt, G. B., & Miller, D. A. (2015). Facebook fired: Legal perspectives and young adults â€TM opinions on the use of social media in employment decisions. *Computers in Human Behavior*, 46, 123–128. https://doi.org/10.1016/j.chn.2015.01.011.
- Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook "Friends:" Social capital and college students' use of online social network sites. *Journal of Computer-mediated Communication*, 12, 1143–1168. https://doi.org/10.1111/i.1083-6101.2007.00367.x.
- Ellison, N., Steinfield, C., & Lampe, C. (2011). Connection strategies: Social capital implications of Facebook-enabled communication practices. New Media & Society, 13, 873–892. https://doi.org/10.1177/1461444810385389.
- Floyd, K., & Voloudakis, M. (1999). Attributions for expectancy violating changes in affectionate behavior in platonic friendships. *The Journal of Psychology*, 133, 32–48. https://doi.org/10.1080/00223989909599720.
- Goffman, E. (1967). Interaction ritual: Essays in face-to-face behavior. New York, NY: Pantheon Books.
- Griffin, C., Bengry-Howell, A., Hackley, C., Mistral, W., & Szmigin, I. (2009). "Every time I do it I absolutely annihilate myself": Loss of (self)-consciousness and loss of memory in young people's drinking narratives. Sociology, 43, 457–476.
- Hayes, A. (2013). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. New York, NY: Guilford Press.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. Structural Equation Modeling, 6, 1–55. https://doi.org/10.1080/10705519909540118.
- Kalman, Y. M., & Rafaeli, S. (2010). Online pauses and silence: Chronemic expectancy violations in written computer-mediated communication. *Communication Research*, 38, 54–69. https://doi.org/10.1177/0093650210378229.
- Kernahan, C., Bartholow, B. D., & Bettencourt, B. A. (2000). Effects of category-based expectancy violation on affect-related evaluations: Toward a comprehensive model. Basic and Applied Social Psychology, 22, 85–100. https://doi.org/10.1207/ S15324834BASP2202.
- Lampe, C., Ellison, N., & Steinfield, C. (2006). A Face(book) in the crowd: Social searching vs. social browsing. In Proceedings of the 2006 20th anniversary conference on computer-supported cooperative work CSCW '06 (pp. 167–170). https://doi.org/10.1145/1180875.1180901.
- Larsson, A. O. (2016). Online, all the time? A quantitative assessment of the permanent campaign on Facebook. *New Media & Society*, 18, 274–292. https://doi.org/10.1177/1461444814538798.
- Leary, M. R. (1983). Understanding social anxiety. Beverly Hills, CA: Sage.
- Leary, M. R. (1995). Self-presentation: Impression management and interpersonal behavior. Dubuque, IA: Brown & Benchmark's.
- Leary, M. R., Britt, T. W., Cutlip, W. D., & Templeton, J. L. (1992). Social blushing.
 Psychological Bulletin, 112, 446–460. https://doi.org/10.1037/0033-2909.112.3.446.
- Leary, M. R., Tambor, E. S., Terdal, S. J., & Downs, D. L. (1995). Self-esteem as an interpersonal monitor: The sociometer hypothesis. *Journal of Personality and Social Psychology*, 68, 518–530. https://doi.org/10.1037/0022-3514.68.3.518.
- Lerner, J. S., Li, Y., Valdesolo, P., & Kassam, K. S. (2015). Emotion and decision making.

- Annual Review of Psychology, 66, 799-823. https://doi.org/10.1146/annurev-psych-010213-115043.
- Levine, T. R., Anders, L. N., Banas, J., Baum, K. L., Endo, K., Hu, A. D. S., et al. (2000). Norms, expectations, and deception: A norm violation model of veracity judgments. Communication Monographs, 67, 123–137. https://doi.org/10.1080/ 03637750009376500.
- Lim, S. S., Vadrevu, S., Chan, Y. H., & Basnyat, I. (2012). Facework on Facebook: The online publicness of juvenile delinquents and youths-at-risk. *Journal of Broadcasting and Electronic Media*, 56, 346–361. https://doi.org/10.1080/08838151.2012.705198.
- Litt, E., Spottswood, E. L., Birnholtz, J. P., Hancock, J. T., Smith, M. E., & Reynolds, L. (2014). Awkward encounters of an "other" kind: Collective self-presentation and face threat on Facebook. In Proceedings of the ACM conference on computer supported cooperative work (CSCW2014) (pp. 449–460). New York, NY: ACM. https://doi.org/10.1145/2531602.2531646.
- Marder, B., Joinson, A., Shankar, A., & Thirlaway, K. (2016). Strength matters: Self-presentation to the strongest audience rather than lowest common denominator when faced with multiple audiences in social network sites. *Computers in Human Behavior*, *61*, 56–62. https://doi.org/10.1016/j.chb.2016.03.005.
- Marwick, A. E., & boyd, D. (2010). I tweet honestly, I tweet passionately: Twitter users, context collapse, and the imagined audience. *New Media & Society*, 13, 114–133. https://doi.org/10.1177/1461444810365313.
- McLaughlin, C., & Vitak, J. (2012). Norm evolution and violation on Facebook. *New Media & Society*, 14, 299–315. https://doi.org/10.1177/1461444811412712.
- Mendes, W. B., Blascovich, J., Hunter, S. B., Lickel, B., & Jost, J. T. (2007). Threatened by the unexpected: Physiological responses during social interactions with expectancy-violating partners. *Journal of Personality and Social Psychology*, 92, 698–716. https://doi.org/10.1037/0022-3514.92.4.698.
- Miller, R. S. (1986). Embarrassment: Causes and consequences. In W. H. Jones, J. M. Cheeks, & S. R. Briggs (Eds.), Shyness: Perspectives on research and treatment (pp. 295–311). New York: Plenum.
- Miller, R. S. (1992). The nature and severity of self-reported embarrassing circumstances. Personality and Social Psychology Bulletin, 18, 190–198. https://doi.org/ 10.1177/0146167292182010.
- Oh, H. J., & LaRose, R. (2016). Impression management concerns and supportseeking behavior on social network sites. *Computers in Human Behavior*, 57, 38–47. https://doi.org/10.1016/j.chb.2015.12.005.
- Park, L. E., & Crocker, J. (2008). Contingencies of self-worth and responses to negative interpersonal feedback. Self and Identity, 7, 184–203. https://doi.org/ 10.1080/15298860701398808.
- Pew Research Center. (2017). Social media fact sheet. Retrieved from: http://www.pewinternet.org/fact-sheet/social-media/.
- Ramirez, A., & Wang, Z. (2008). When online meets offline: An expectancy violations theory perspective on modality switching. *Journal of Communication*, 58, 20–39. https://doi.org/10.1111/j.1460-2466.2007.00372.x.
- Reinecke, L., & Trepte, S. (2014). Authenticity and well-being on social network sites: A two-wave longitudinal study on the effects of online authenticity and the positivity bias in SNS communication. *Computers in Human Behavior*, 30, 95–102. https://doi.org/10.1016/j.chb.2013.07.030.
- Rui, J. R., Covert, J. M., Stefanone, M. a., & Mukherjee, T. (2015). A communication multiplexity approach to social capital: On- and offline communication and

- self-esteem. Social Science Computer Review, 33, 498-518. https://doi.org/10.1177/0894439314552803.
- Rui, J. R., & Stefanone, M. A. (2013). Strategic image management online: Self-presentation, self-esteem, and social network perspectives. *Information, Communication, and Society,* 16, 1286–1305. https://doi.org/10.1080/1369118X.2013.763834.
- Schlenker, B. R. (1980). Impression management: The self-concept, social identity, and interpersonal relations. Monterey, CA: Brooks/Cole Publishing Company.
- Smock, A. (2010). Self-presentation on Facebook: Managing content created by the user and others. In *Paper presented at the 60th annual conference of international communication association*. Singapore.
- Stefanone, M. A., Lackaff, D., & Rosen, D. (2011). Contingencies of self-worth and social networking site behavior. Cyberpsychology, Behavior, and Social Networking, 14, 41–49. https://doi.org/10.1089/cyber.2010.0049.
- Tokunaga, R. S. (2010). Following you home from school: A critical review and synthesis of research on cyberbullying victimization. *Computers in Human Behavior*, 26, 277–287. https://doi.org/10.1016/j.chb.2009.11.014.
- Tokunaga, R. S. (2011). Friend me or you'll strain us: Understanding negative events that occur over social networking sites. Cyberpsychology, Behavior and Social Networking, 14, 425–432. https://doi.org/10.1089/cyber.2010.0140.
- Tracy, K., Van Dusen, D., & Robinson, S. (1987). "Good" and "bad" criticism: A descriptive analysis. Journal of Communication, 37, 46–59. https://doi.org/ 10.1111/i.1460-2466.1987.tb00982.x.
- Vandenberg, R. J. (2006). Statistical and methodological myths and urban legends. Organizational Research Methods, 9, 194–201.
- Walther, J. B., & Parks, M. (2002). Cues filtered out, cues filtered in: Computer-mediated communication and relationships. In M. L. Knapp, & J. A. Daly (Eds.), Handbook of interpersonal communication (pp. 529–563). Thousand Oaks, CA: Sage.
- 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, 229–253. https://doi.org/10.1177/0093650208330251
- Walther, J. B., Van Der Heide, B., Kim, S., Westerman, D., & Tong, S. (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, 28–49. https://doi.org/10.1111/j.1468-2958.2007.00312.x.
- Waterloo, S. F., Baumgartmer, S. E., Peter, J., & Valkenburg, P. M. (2017). Norms of online expressions of emotion: Comparing Facebook, twitter, instagram, and WhatsApp. New Media & Society. https://doi.org/10.1177/1461444817707349. Advance online publication.
- Wellman, B., & Wortley, S. (1990). Different strokes from different folks: Community ties and social support. *American Journal of Sociology*, 96, 558–588.
- Wohn, D. Y., & Spottswood, E. L. (2016). Reactions to other-generated face threats on Facebook and their relational consequences. *Computers in Human Behavior*, 57, 187–194. https://doi.org/10.1016/j.chb.2015.12.021.
- Workman, T. A. (2001). Finding the meanings of college drinking: An analysis of fraternity drinking stories. *Health Communication*, 13, 427–447. https://doi.org/ 10.1207/S15327027HC1304.