The influence of leader emotional expressions on perceptions of leader self-sacrifice intentions: The moderating role of leader prototypicality and follower identification

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ABSTRACT

In two laboratory studies, we examine the influence of follower perceptions of leader prototypicality and follower identification on how followers assess the appropriateness of a leader’s emotional expressions during crisis situations. We first hypothesize that perceptions of leader prototypicality and the leaders’ expressions of situation-appropriate emotions will influence followers’ assessments of whether a leader is likely to engage in self-sacrificial behaviours. In Study 1, 366 undergraduate psychology students from a large private Malaysian institution participated in an experimental study in which they viewed a video portraying a leader conveying a crisis situation whilst expressing either situationally-appropriate or situationally-inappropriate emotions. Results from this study showed that the effect of appropriate leader emotions was stronger for group-prototypical leaders than for non group-prototypical leaders. We found similar pattern of results with a follow-up experimental study of 157 undergraduate psychology students, in that expressions of situationally-appropriate emotions by leaders is especially important for followers who identify strongly with their group. Findings from these two studies provide initial evidence for the role of emotions in influencing followers’ perceptions of leader intentions through their emotional expressions. We discuss the theoretical and practical implications of these findings.

Keywords: Emotions; leader prototypicality; social identity
Emotions in Leadership Processes: The Role of Leader Expressed Emotions

Emerging interest in affective processes in organization research indicates that scholars no longer assume organizational behaviour to be dictated and driven solely by rational, cognitive processes (Brief & Weiss, 2002; George, 2000). The role of affect is evident in scholarly research of charismatic leaders (Bass, 1985; Conger & Kanungo, 1998). Recently, Erez, Misangyi, Johnson, LePine and Halverson (2008) and Bono and Ilies (2006) conceptualized leader charisma revolving around the transfer of positive affect from leaders to followers. These authors suggest that charismatic leaders influence followers through the transfer of positive affect, causing followers to feel more positive affect themselves. Recent theorizing, however, suggests that scholars also need to consider contexts in which the expression of negative affect to followers may be seen not only as justified, but also as appropriate (Gooty, et al., 2010). In this paper, we suggest that the effectiveness of leaders’ expressed affect may also hinge on how followers perceive leader’s displays of emotion. In the present two studies, we examine how leader group-prototypicality and follower group identification affects how followers perceive a leader’s expressed emotions. We examine this effect in a situation where demands on leader group-prototypicality and relevant leader emotional expressions are particularly important – within a crisis situation.

Emotions as an Element of Group Identity: The Role of Leader Expressed Emotions

Within the context of social interactions such as leadership, the sharing and collective expression of similar emotions forms an important part of one’s social identity (Rimé, 2007). Collective expressions of the same emotions lead individuals to experience emotional communion, contributing to feelings of unity and enhancing feelings of belongingness to the group (Rimé, 2007). In a leadership context, leaders may thus ‘set the emotional tone’ of their groups, and this influences how followers are expected to feel within the group context.
(Pescosolido, 2002). A leader’s emotional responses may serve as a particularly important reference point for followers’ expected behaviors under conditions of uncertainty and ambiguity, and that expressions of situationally-appropriate emotions are overt expressions of a leader’s concern for their group’s welfare (Haslam, et al., 2001).

Bucy (2000) suggests that followers employ ‘emotional appropriateness heuristics’ to judge a leader’s non-verbal behavior and make inferences about a leader’s traits. The author suggests that a leader’s expression of emotions must be compatible with the situation and context in which the leader is conveying the message to be perceived favourably by followers. Results from this study showed that followers rated leaders as being more honest and trustworthy if they were seen expressing emotions appropriate to the situation in question. Conversely, the lack of appropriate leader emotional expressions resulted in followers evaluating leaders negatively. Bucy (2000) suggests that when leaders violate followers’ expectations of normative, situationally-appropriate emotional expressions, followers experience lowered confidence towards the leader and rate the leader more negatively than if the leader expressed situationally-appropriate emotions. Likewise, Stewart, Waller and Schubert (2009) found in their study that followers judged their leader to be more credible and trustworthy when they expressed micro-level emotional expressions consistent with the situation. Results from this study crucially highlights that even at its most subtle, brief emotional expressions have a strong influence on how followers form judgments about their leaders. Finally, Madera and Smith’s (2009) study sheds further light on the importance of situationally-appropriate emotions in influencing perceptions of a leader. In this study, leaders expressing either sadness or a combination of sadness/anger were perceived to be more effective than leaders expressing anger alone. Madera and Smith (2009) explained that the expression of sadness towards the crisis situation was
perceived to be appropriate by followers, who perceived that the leader was expressing sympathy and concern for the organization’s welfare. More broadly, these findings suggest that leader expressions of negative emotions may at times be deemed appropriate or perhaps even desired by followers.

These studies highlight the importance of leaders expressing situationally-appropriate emotions in relation to their group’s current situation. Leaders expressing situationally-appropriate emotions may be seen as conveying an intention to engage in self-sacrificial behaviours. Followers may be using observable emotions-based cues to assess the extent to which the leader is willing to engage in group-serving behavior. Consistent with the emotions-as-social-information (EASI) model, (van Kleef, de Dreu & Manstead, 2010) observers may judge others’ intentions and expected behaviors on their evaluations of the expresser’s emotion cues. Indeed, research shows that a leader’s emotional expressions are typically more important in influencing followers’ judgments of a leader’s sincerity than the objective content of the leader’s communication (Dasborough & Ashkanasy, 2002; Newcombe & Ashkanasy, 2002).

We thus propose that followers will look to a leader’s expressed emotions as a way to judge the leader’s in-group orientation. Having a leader express situationally-appropriate emotions in a crisis (a situation characterized by heightened uncertainty and ambiguity) helps followers reduce subjective uncertainty, effectively signaling to the followers that the leaders are orientated towards the interests and welfare of the groups they lead, and, as a way to guide the group under conditions of uncertainty (Grieve & Hogg, 1999; Schaubroeck & Shao, 2012). The preceding studies, however, did not consider the influence of the leader’s group-relevant attributes on how effective or impactful their expressed emotions will be in influencing follower perceptions. As such, in this study, we examine the effect of emotion appropriateness on
followers’ perception of the leader self-sacrifice on varying levels of leader group-prototypicality.

Social Identity Model of Leadership

The social identity model of leadership (SIMOL) suggests that leadership effectiveness is dependent on how leaders affirm and create a distinct, social identity for their followers (van Knippenberg & Hogg, 2003). Followers’ social identity is enacted in a collective context, where followers identify themselves as members of a certain group which is distinct from that of their individual-level identities (Bettencourt & Hume, 1999; Hogg, Cooper-Shaw & Holzworth, 1993; Hogg, Hardie & Reynolds, 1995). An effective leader is one who leads their groups in a manner that fulfills the group members’ need for positive distinction and enhances their self-esteem through affiliation with a particular group (Reicher, Haslam & Hopkins, 2005). Followers’ social identity, therefore helps reduce followers’ feelings of uncertainty brought upon by contextual and environmental influences by allowing followers to identify with a particular group and/or towards a leader who affirms the group’s values, goals and ideals (Hogg, 2000; 2001; Hogg & Terry, 2000).

The premise of the SIMOL revolves around the key leader characteristic of representativeness, or prototypicality of the group. Group-prototypical leaders are leaders who are seen to embody and represent a group prototype different from that of other groups. These group prototypes are essentially fuzzy sets of attributes that in a social context represent the essence of a group and differentiate it from other groups (Hogg, 2001; van Knippenberg & Hogg, 2003). Being prototypical of their group’s ideals, values and norms therefore creates a positive distinctiveness between the leader’s own groups from that of other groups. Leader group-prototypicality has been consistently shown as the central element in determining
perceptions of leader endorsement under the SIMOL (Hains, Hogg & Duck; 1997; Fielding & Hogg; 1997; Hains, Hogg & Mason; 1998). Results from these studies also suggest that this endorsement may stem from two underlying follower-based cognitive processes. First, followers may perceive that since group prototypical leaders have a greater degree of referent and information power stemming from them being prototypical, they are more likely than non-group prototypical leaders to engage in actions that will benefit the group. Second, followers may form positive attributions of a leader’s prototypicality as indicative of his/her group-orientation (van Knippenberg & Hogg, 2003).

There is, however, one particular avenue for further research within the SIMOL that has not yet been fully examined. While the SIMOL has prescribed that group-prototypical leaders exemplify and represent the group’s values, expectation of behaviors and norms, fewer studies have examined how group-prototypical leaders uphold the group’s collective emotions. Brown and Capozza (2006) note this oversight, stating that the affective processes inherent in social identity theory have been largely overlooked. Linking both streams of study—the appropriateness of leader expressed emotions and social identity theory leads us to propose that leader’s expressed emotions will serve as an indicator of their self-sacrifice intentions. In addition, the leader’s group-prototypicality may be a potentially important moderator that influences followers’ perceptions of whether a leader’s expressed emotions serves as an accurate indicator of their self-sacrifice intentions.

STUDY 1
Overview – Study 1

In Study 1, we predict that the effect of expressed emotions on followers’ perception towards the leader self-sacrifice intentions will be stronger for prototypical leaders than non-prototypical leaders. We argue that this will be the case given that group-prototypical leaders are expected to engage in actions (and in this context, express emotions) that are deemed appropriate for the group’s current situation, in comparison with non group-prototypical leaders. Likewise, we expect that followers are less likely to infer such expectations from non group-prototypical leaders. Our study’s model is depicted in Figure 1 and we hypothesize that:

\textit{Hypothesis 1: There will be a two-way interaction effect between the appropriateness of the leader’s expressed emotions and leader prototypicality on followers’ perceptions of leader self-sacrifice intentions.}

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\textbf{Method}

\textbf{Sample}

Three hundred and sixty six (366) undergraduate psychology students from a large private university in Malaysia participated in this study in exchange for course credit. The sample consisted of 83 males and 283 females aged 18 to 56 with an average age 20.71 years. Participants were randomly assigned to one of four experimental treatment conditions - appropriate emotions portrayed by a prototypical leader; inappropriate emotions portrayed by a prototypical leader; appropriate emotions portrayed by a non-prototypical leader; inappropriate emotions portrayed by a non-prototypical leader.

\textbf{Procedure}
The study is a 2 x 2 between-subjects laboratory experiment where participants were assumed the roles of team members of a university welfare society (henceforth referred to as the ‘Society’) that was experiencing a crisis. Participants were told that the leader of the society will be holding a live video conference to update them on the crisis situation. The two independent variables in our first study are leader emotion appropriateness (appropriate; inappropriate) and leader group-prototypicality (prototypical; non-prototypical), while the dependent variable is self-sacrifice intentions. Once participants indicated their consent to participate in the study, they were given three minutes to read a description of the situation of the crisis scenario (See Appendix 1).

After reading the scenario, the experiment facilitator plays one of four videos (i.e. the video conference) with the leader addressing the participants in relation to the issues pertaining to the crisis. In the appropriate condition, the leader describes the situation using emotion-laden words related to sadness such as ‘discouraging’, ‘disappointed’, ‘worried’, and ‘grim’, while also portraying facial expressions indicative of sadness throughout his speech. In the inappropriate condition, the leader related the crisis situation word-for-word, but instead portrayed facial expressions that hinted on subtle joy and contentment\(^1\). We were cautious in ensuring that the actor did not portray the joyful expression in an exaggerated manner, which may have caused participants to perceive the emotion as being inauthentic. Rather, we intended the leader’s the expression of joy in the inappropriate condition to subtly suggest that the leader

\(^1\) We tested the suitability of our crisis scenario by asking 30 undergraduate students from a separate cohort the question, “Which of these emotions are appropriate for the leader to express during the video conference?” Results from this pilot study indicated that participants rated sadness being the most appropriate leader emotional expression for this situation \((M = 5.07, S.D. = .96)\), whereas joy \((M = 2.07, S.D. = 1.13)\) was seen to be the most inappropriate emotional expression for the leader to display in the video conference. Dependent \(t\)-tests indicate that the means of both these emotions were significantly different from one another \(t(28) = 5.44, p < .001\). This informs our decision to manipulate the leader’s emotional appropriateness by using sadness for the appropriate condition and joy for the inappropriate condition.
was lackadaisical towards the Society’s crisis and problems. We manipulated leader group-prototypicality (non-prototypicality) by having the leader describe how similar or different he is to the participants:

_I hope we can work together to bring our society back and running to the way it was before. As you know, as your leader, I (closely/do not always) represent the society’s culture and norms. I have a very (similar/different) background with all of you in terms of work experience with social and welfare groups in the country. I also have many (similar/different) values in terms of life and work with you as the society’s members. I hope you (see this/do not see this) to be a (positive/negative) point when working with me in restoring the society._

We asked the leader to portray an emotionally-neutral expression when describing the extent of his prototypicality above. In doing so, we intended to limit the likelihood of the leader’s emotional expressions overriding the believability of the leader’s claims that he is similar (i.e. group-prototypical) to the participants.

**Measures**

_Leader self-sacrifice intentions_. Participants’ perceived leader self-sacrifice intentions were measured using a 4-item measure adapted from van Knippenberg and van Knippenberg’s (2005) study. A sample item of this scale was “The leader is likely to make a personal sacrifice for the Society”. Changes were made to reflect ratings of the leaders in relation to the society (as opposed to ‘team’) in the scenario. Participants provided their response on a 5-point Likert-type scale and was found to be reliable at α=.81.

**Results**
Hypothesis Tests

Results from the factorial ANOVA show that the main effect of leader group-prototypicality on self-sacrifice intentions was significant $F (1, 362) = 5.18, p < .05$; however, the main effect of emotion appropriateness on self-sacrifice intentions was non-significant $F (1, 362) = 1.83, ns$. Specifically, the effect of leader group-prototypicality on self-sacrifice intentions was stronger when the leader displays appropriate emotions than when the leader displayed inappropriate emotions. Thus, regardless of whether the leader displays appropriate or inappropriate emotions, the leader’s self-sacrifice intentions were rated similarly by the followers.

The analysis also showed that the interaction effect of leader group-prototypicality and emotion appropriateness on self-sacrifice intentions was significant $F (1, 362) = 6.94, p < .01$. Simple effect analyses showed that the effect of emotion appropriateness on self-sacrifice intentions was significant when the leader is portrayed as group-prototypical, $F (1, 362) = 7.51, p < .01$ but non-significant when the leader is portrayed as non group-prototypical $F (1, 362) = .88, ns$. This result suggests that leader group-prototypicality is a significant moderator in the relationship between emotion appropriateness and self-sacrifice intentions, supporting Hypothesis 1. Figure 2 illustrates the significant moderating effect of leader prototypicality on the relationship between emotion appropriateness and self-sacrifice intentions.

Discussion – Study 1
Results from Study 1 showed that the relationship between appropriate emotions and followers’ perception towards the leader self-sacrifice was significant and stronger when the leader is perceived by followers as being prototypical than when the leader was perceived as non-group-prototypical. Although these results are promising, there are several limitations that warrant consideration before inference of these findings can be generalized to a wider population. The first limitation relates to artificiality concerns of the present crisis scenario and how the scenario is perceived by the participants. Expressions of joy as expressed by the leader in the video may be perceived as being unusual in such crisis situations, and raise concerns on the believability of the scenario to certain participants. However, we position our findings here as a means of theory-building, and suggest from our findings more broadly that, there are certain emotions which are deemed completely inappropriate in certain situations and would be detrimental to perceptions of leader self-sacrifice intentions if expressed. Our results are also consistent with previous research on the effects of situation-appropriate emotions (Bucy, 2000; Stewart, et al., 2009; Madera & Smith, 2009) in that expressions of leader emotions are important cues by which followers judge leaders.

We also acknowledge that we did not measure participants’ baseline group identity. Given the multi-racial nature of our sample, participants may have used their race, for example, as a salient social identity than other group membership (Chattopadhyay, Tluchowska, & George, 2004). Thus, participants who do not view the membership to the Society as part of their salient group identity may be less likely to be affected by the emotional expressions of the leaders than those who value the group membership of the Society. We attempted to limit the influence of other social identities in this study by priming participants to assume roles that they could relate to in this study. This informs our reason to develop a university society scenario of
which many of our participants could easily relate to. However, we acknowledge that other follower-centric characteristics (such as identification) may have also moderated the perceptions of appropriate leader emotions and expectations of leader self-sacrifice behaviour in this study.

The third limitation of our study concerns our inability to tease apart the influence of prototypicality and appropriateness and assess their impact on follower perceptions independently. Given that our manipulated variables (prototypicality and appropriateness) were categorized as nominal variables, we were unable to quantitatively tease apart the influence of each factor and assess its impact on follower perceptions. It may be possible that perceptions of the appropriateness of a leader’s expressed emotions, and perceptions of their prototypicality may mutually influence one another, and that followers may perceive leaders as being more prototypicality if they expressed situationally-appropriate emotions (and vice-versa). While the absence of a significant relationship between leader prototypicality and appropriate leader emotions ($r = -.02, ns$) lowers this concern a little, we acknowledge that measuring these two variables on a continuous (rather than a categorical) level would allow us to better assess the relationship between these two variables.

**STUDY 2**

**Overview – Study 2**

We conduct a follow up study in order to improve on the three aspects highlighted as limitations in Study 1. First, we manipulated leader emotional expressions in a more subtle manner. In place of the video teleconference setting, we attempted to depict the leader’s emotions as expressed through written communications (i.e. an email). We then included an additional measure of follower identification, and hypothesize that identification may also be a key moderating influence in between followers’ perceptions of leader emotional appropriateness.
and perceptions of leader self-sacrifice intentions. Finally, we took measures of leader prototypicality and emotional appropriateness on continuous scales, thereby allowing us to better assess the influence of our two manipulated variables on the outcome - followers perceptions of leader self-sacrifice intentions.

Building on Hypothesis 1, we suggest that this two-way interaction will also be moderated by followers’ identification with their team. We propose that the extent to which followers assess the appropriateness of leaders’ emotional expressions during the crisis situation will also be moderated they extent to which they identify with their group. We argue that identification – both cognitive and affective identification are brought upon by followers’ perception of belongingness and positive distinctiveness brought upon by group membership, along with the positive feelings associated with this group membership (Epitropaki & Martin, 2005). The strength of individual identification with their group increases their susceptibility to being influenced by their group, and increases the likelihood that they will engage in actions that are intended to benefit the group’s interest (van Knippenberg & Hogg, 2003; Howell & Shamir, 2005). As such, when followers identify more with their group, they are more likely to engage in actions that are intended to preserve the salient group identity.

One way in which followers do this is through forming negative, unfavourable perceptions towards influences which may be seen as being a negative influence on group identity. These negative perceptions may subsequently translate to actions that indicate their disapproval of a leader’s influence towards their group, and the group identity. Haslam and Reicher’s (2006) study provides some support for this proposition. In the study, the authors showed that the strength of a shared social identity may be a means by which followers either promote or limit the influence of leaders. The authors found that low-power individuals who
shared a strong sense of identity, were able to resist the influence of high-power individuals who shared a weak social identity, suggesting that when individuals shared a collective, salient identity, they provided each other with more social support and effectively resisted the effects of external, situational stressors. Followers who identify strongly with the group then, would have greater interest in preserving the group identity, and more likely to perceive leaders who express situationally-inappropriate emotions as a detrimental influence on group identity in contrast with followers who identify weakly with their group. Our revised hypothesis for Study 2 is thus:

**Hypothesis 1:** There will be a two-way interaction effect between the appropriateness of the leader's expressed emotions, leader prototypicality and follower-identification on followers’ perceptions of leader self-sacrifice intentions.

**Method**

**Design and Sample**

In addition to emotion appropriateness and leader prototypicality as two manipulated variables and self-sacrifice intentions as the outcome variable in Study 1, we also included a measure of follower identification as a moderating variable in the relationship between the interaction effect of emotion appropriateness and leader prototypicality on self-sacrifice intentions for Study 2. One hundred and fifty-seven (157) undergraduate psychology students, consisting of 52 males and 105 females, with an average age of 20.15 years, from the same private institution in Malaysia took part in Study 1 in exchange for course credit. Participants were randomly assigned to one of four experimental treatment conditions.

**Procedure**
In place of the video recording for Study 2, we manipulated the appropriateness of leader emotions and perceptions of the leader’s prototypicality via an email message sent by a leader in the event of a crisis. Email communications are not uncommon in today’s organizations (de Cremer, 2006) and previous studies have also used similar hypothetical scenarios such as this in laboratory studies of leadership and affect (Choi & Mai-Dalton, 1999; Madera & Smith, 2009). The scenario used in Study 2 involved asking participants to assume the role of committee members organizing a mental health campaign. Participants were asked to read an email message in which the project leader of the mental health explained that the campaign is being adversely affected by several incidents that have affected the progress of the campaign. We took measures to make the crisis situation as similar to that depicted in Study 1, and stating for this scenario that the campaign was threatened by cuts to funding from external parties, and members deserting the committee. We manipulated the extent of emotional appropriateness expressed by the leader in the final paragraph of the scenario. The email in the appropriate condition read:

*I feel discouraged upon realizing the crisis the project is currently facing. In all honesty, I am really concerned with the problems we are facing and worried that we may not be able to make the deadline with limited funds and assistance. Thinking about the situation we are in makes me anxious about the future of this project, and I am apprehensive about our departments’ ability to recover from this setback. Thinking about the lack of funding, in particular, makes me disappointed that our would-be sponsor would backtrack on their word to sponsor our project. Seeing the organizing committee members quit their positions midway is also causing me to feel dismay.*
Conversely, in the inappropriate condition, we once again depicted the leader as being somewhat lackadaisical towards the crisis situation, implying that the leader was unaffected by the severity of the crisis. The email in this inappropriate condition read:

*I do not feel discouraged despite realizing the crisis the project is currently facing. In all honesty, I am not really concerned with the problems we are facing and not worried – I still feel that are able to make the deadline despite the limited funds and assistance. Thinking about the situation we are in does not make me anxious about the future of this project, and I am not apprehensive about our department’s ability to recover from this setback. Thinking about the lack of funding, makes me realize that this is a common problem facing many projects of this scale. Seeing the organizing committee members quit their positions midway is not a cause for concern.*

We manipulated leader prototypicality by providing details of the leader’s background at the start of the study. As participants were undergraduate psychology students, a prototypical leader would hence be described as an individual who possessed psychology-related qualifications from the university from which the sample was drawn from. Conversely, we depicted a non-prototypical leader by stating that the project leader possessed communications-related qualifications from a different university.

**Measures**

*Appropriateness of Leader Emotions.* Participants assessed the appropriateness of the leader emotions inferred from the email message using a 4-item measure from Shields and Warner’s (2009) Perception of Emotion Appropriateness Rating Scale (PEARS). We used the 4 items from the ‘type present’ factor of the scale, and asked participants to state on a 5-point
Likert type scale, with statements such as “I think the types of emotions the leader felt were normal. This scale was found to be reliable at .74.

**Leader prototypicality.** Participants provided ratings of how prototypical the leader was through 5 items from van Knippenberg and van Knippenberg’s (2005) study. An example item was “The leader represents what is characteristic about my Department”, assessed on a 5-point Likert-type scale. This scale was reliable at .89.

**Leader self-sacrifice intentions.** As with Study 1, we used the same scale from van Knippenberg and van Knippenberg’s (2005) study to assess participants’ perceptions of leader self-sacrifice intentions. An example item is “The leader is likely to make a personal sacrifice for the Department.” The scale was reliable at .77 for this study.

**Follower identification.** We used the six items from Mael and Ashforth’s (1992) scale of organizational identification. Items from this scale were re-worded to reflect the situation, which involved re-wording ‘organization’ to ‘department’. A sample item was “When someone criticizes the Department of Psychology, it feels like a personal insult.” The scale returned an alpha value of .67 for this study.

**Results**

**Descriptive Statistics and Zero-order Correlations**

Means and standard deviations of variables and correlations between the variables are presented in Table 1.

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Insert Table 1 about here
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**Manipulation checks.** We conducted two independent sample *t*-tests to examine the effectiveness of the manipulation of the two independent variables (emotion appropriateness and leader prototypicality). The results showed that participants in the appropriate emotion condition gave a significantly higher rating of emotion appropriateness (*M* = 3.43, *SD* = .57) than participants in the inappropriate emotion condition (*M* = 3.03, *SD* = .88; *t* [134.39] = 3.35, *p* = .001). Similarly, the *t*-test result showed that participants in the prototypical condition gave a significantly higher rating of prototypicality (*M* = 3.16, *SD* = .74) than participants in the non-prototypical condition (*M* = 2.88, *SD* = .85; *t* [155] = 2.18, *p* < .05). The significant differences between the conditions showed that the manipulation of the two independent variables is successful in this study.

**Hypothesis Test: Moderating Role of Identification**

Hierarchical regression analysis was performed to test the hypothesis. Prior to the analysis, all predictors and moderator were centered at their respective means. Then, interaction terms (three two-ways and one three-way) were created based on the centered predictors and moderator. Centered variables were used to reduce the problem of multicollinearity (Aiken & West, 1991). Results from the stepwise analysis are shown in Table 2.

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Insert Table 2 about here

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Results showed that the overall regression model is a significantly better model in predictability of self-sacrifice intentions than using mean as the model, *F* (7, 148) = 6.56, *p* < .001. Altogether, the predictors, as well as all two-way and three-way interaction terms explained 20.10% of the total variance in self-sacrifice intentions (*R^2_{adj} = .20, SE = .64*). However,
inclusion of two-way interaction effects (Step 2) and three-way interaction effect (Step 3) did not show significant incremental predictability on leader’s self-sacrifice intentions (the values of $R^2_{ch}$ are non-significant; see Table 2). The analysis also showed that the main effects of both the predictors (emotion appropriateness and prototypicality) on leader’s self-sacrifice intentions were significant ($\beta = .28, p = .001$ and $\beta = .24, p < .01$, respectively). That is, there is a positive effect of emotion appropriateness of leader and leader’s prototypicality on perceived leader’s self-sacrifice intentions. The main effect of identification of leader’s self-sacrifice intentions was non-significant ($\beta = -.01, ns$).

The three-way interaction term (emotional appropriateness x prototypicality x identification) on self-sacrifice intentions was non-significant. Followers’ identification did not moderate the interaction effect of emotion appropriateness and leader prototypicality on self-sacrifice intentions ($\beta = -.13, p = .17$). However, one of the three two-way interaction terms (prototypicality x identification) was significant ($\beta = .22, p < .05$). Hence, although identification did not significantly moderate the two-way interaction effect on self-sacrifice intentions, it did moderate the relationship between prototypicality and self-sacrifice intentions. Simple slope analysis revealed that the effect of prototypicality on self-sacrifice intentions was stronger for participants who reported a high level of identification, $t (146) = 3.61, p < .001$ but not for participants who reported a low level of identification, $t (146) = 1.42, ns$. Figure 3 illustrates the significant moderating effect of identification on the relationship between prototypicality and self-sacrifice intentions.

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Insert Figure 3 about here

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General Discussion

Summary of Results

Results from both Study 1 and 2 showed the impact of follower perceptions of leaders’ emotional expressions and prototypicality interact in complex ways in shaping followers’ assessment of the leader’s self-sacrifice intentions. In Study 1, the extent of appropriate leader emotions interacts with perceptions of leader prototypicality in influencing follower perceptions. In Study 2, we find that appropriate leader emotions has a significant main effect, but does not interact with, perceptions of leader prototypicality and nor follower identification. These differential results suggest that judgments of leaders’ self-sacrifice intentions may partly be dependent on how the message is conveyed to followers during a crisis. In face-to-face interactions, followers judge leaders’ self-sacrifice intentions through their emotional expressions and perceptions of their prototypicality. Conversely if the message relating to the crisis is relayed via text, followers appear to rely more on surface-level characteristics – in this case, leader prototypicality, to assess their judgment of leader self-sacrifice intentions.

Theoretical Contributions

The present study findings contribute to the literature in several ways. First, we extend on social identity theory by affirming and providing further evidence that group-experienced emotions are an important part of group identity. The studies provide some evidence to illustrate the importance of considering the emotions as an integral component of group identity. This is in line with Brown and Capozza’s (2006) suggestion that social identity theory has overlooked group emotional experience as an important part of group identity. We show that a leader’s emotional expressions are an important mechanism for reducing followers’ experience of situational ambiguity within a group context. Second, we find that leader group-prototypicality
may not only directly influence leader effectiveness, but also act as a moderator, influencing the strength of the relationship between emotion appropriateness and evaluations of leader self-sacrifice intentions. Previous research has found that followers use leaders’ expressed emotions as a means to reduce uncertainty (Grieve & Hogg, 1999; Schaubroeck & Shao, 2012) and as a cue to evaluate the leader’s in-group orientation and trustworthiness. Our findings showed that followers use both perceptions of the appropriateness of the leader’s emotional expressions, and their perceptions of the leader’s prototypicality in judging the likelihood of the leader engaging in self-sacrificial behaviors. Finally, our study also adds to leadership theory by considering the impact of leader emotions within a different situational and cultural context. Most of the preceding research on the impact and appropriateness of leader emotion were conducted using leadership in Western political contexts (Bucy, 2000; Stewart et al., 2009) whereas the present study is conducted outside within the context of organizational leadership in an Asian culture. Despite this difference, we find that the propositions of ‘emotional appropriateness heuristics’ (Bucy, 2000) and the EASI model (van Kleef et al., 2010) are generalizable in explaining the effect of emotion appropriateness within a context that is different from that of the political arena.

**Practical Implications**

Findings from our study suggest leaders may need to engage in behaviors that are representative of group norms. By acting according to group norms, leaders are perceived as or prototypical to the group and as a result, they are more likely to be believed as likely to engage in behaviors that benefit the group (Hogg & van Knippenberg, 2003). This suggestion is consistent with van Knippenberg’s (2011) argument that leader group-prototypicality is not a constant, static trait, but one that is malleable and can be actively managed by leaders. Our findings also
underscore the importance of expressing the right emotions for the right situation for leaders who are representative of their groups. As such, it follows that leaders who are better able to manage their emotions tend to reduce the ambiguity of the work situations and hence, gain the credibility and trust from their subordinates (Grieve & Hogg, 1999; Schaubroeck & Shao, 2012). Further, consistent with suggestions by Humphrey, Pollack and Hawver (2008), this means that the leadership role is one that involves emotional labor. Effective leaders who are aware of the role of emotions in influencing follower behaviors are also those that are able to regulate their emotions to fit those of their current group’s status and situation.

Limitations and Suggestions for Future Research

We acknowledge the generalizability concerns that arise from the use of laboratory experiment settings and that the findings from our two studies may not necessarily be reflective of real-world perceptions that followers form towards their leaders. However, we argue that the dynamics of social identity have been found to be consistent regardless of whether conclusions are drawn from laboratory settings, or from the field (van Knippenberg & van Knippenberg, 2005). Moreover, preceding social identity research on which is study is based on has employed both laboratory and survey methods, obtaining comparable and complementary results (see Giessner & van Knippenberg, 2008; Giessner, van Knippenberg & Sleebos, 2009). Nonetheless, future studies should consider alternative methods and sample from non-student populations in order to better reflect how followers in actual leadership positions form judgements towards their leaders.

Second, the brief exposure to a leader through the video in Study 1 or through the email message in Study 2 may not be sufficient for participants to make concrete judgment about the leader. Participants might base their judgment on the general impression and information that
they were able to recall from the brief experimental stimuli. The fictional scenario of our crisis in our experimental study also meant that the participants are interacting, or viewing the leader for the very first time. We state, however, consistent with de Cremer (2006), that communications in contemporary organizations need not always take the form of face-to-face interactions. It is plausible to suggest that interactions between leaders and followers may make use of more technologically-based communication channels. We agree, nonetheless, that the constraints and aspects of the experimental study’s artificiality mean that future studies can improve on the present experimental design by using a different research design.

Lastly, the present study only examined a stressful situation (i.e., crisis) in which unpleasant emotions are deemed appropriate. While we add to research on leadership emotions calling for more attention to be paid towards the effect of negative emotions (Gooty, et al., 2010), future studies should consider neutral and happy situations in which unpleasant emotions are deemed inappropriate. It will be fruitful to investigate if the effect of emotion appropriateness and leader prototypicality can be extended to non-crisis situations.
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FIGURE 1
Proposed Relationships among Study Variables

Emotion Appropriateness

Leader Prototypicality (Study 1 and 2)

Perceived Self-sacrifice Intentions

Follower Identification (Study 2)

FIGURE 2
Effect of emotion appropriateness on self-sacrifice intentions for prototypical and non-prototypical leaders
FIGURE 3
Effect of prototypicality on self-sacrifice intentions for low and high identification followers
TABLE 1

Means, Standard Deviations, and Correlations (Study 2)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Emotion appropriateness</td>
<td>3.23</td>
<td>.76</td>
<td>(.74)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Leader prototypicality</td>
<td>3.02</td>
<td>.80</td>
<td>.43**</td>
<td></td>
<td></td>
<td>(.89)</td>
</tr>
<tr>
<td>3 Self-sacrifice intentions</td>
<td>3.40</td>
<td>.72</td>
<td>.37**</td>
<td>.37**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Follower identification</td>
<td>3.67</td>
<td>.52</td>
<td>-06</td>
<td>.23**</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

n = 157
* p < .05
** p < .01
### TABLE 2

Hierarchical Regression Analysis for the Moderating Role of Identification (Iden) on the Interaction Effect of Emotion Appropriateness (EA) and Prototypicality (Proto) on Self-sacrifice Intentions (Self-Sac)

<table>
<thead>
<tr>
<th>Step and Variables</th>
<th>Self-Sac</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>EA</td>
<td>.26**</td>
<td>.26**</td>
<td>.28**</td>
</tr>
<tr>
<td>Proto</td>
<td>.26**</td>
<td>.28**</td>
<td>.24**</td>
</tr>
<tr>
<td>Iden</td>
<td>-.03</td>
<td>-.05</td>
<td>-.01</td>
</tr>
<tr>
<td>EA x Proto</td>
<td></td>
<td>.05</td>
<td>-.00</td>
</tr>
<tr>
<td>EA x Iden</td>
<td></td>
<td>-.17</td>
<td>-.14</td>
</tr>
<tr>
<td>Proto x Iden</td>
<td></td>
<td>.19*</td>
<td>.22*</td>
</tr>
<tr>
<td>EA x Proto x Iden</td>
<td></td>
<td></td>
<td>-.13</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>.18***</td>
<td>.20***</td>
<td>.20****</td>
</tr>
<tr>
<td>$\Delta R^2$</td>
<td>.20***</td>
<td>.03</td>
<td>.01</td>
</tr>
</tbody>
</table>

*Note. Standardized beta coefficients are reported for the respective steps, predictors and moderator (Step 1), two-way interactive terms (Step 2), and three-way interactive term (Step 3).*

* $p < .05$
** $p < .01$
*** $p < .001$
APPENDIX 1
Crisis Scenario Script – Study 1

You are a team member of your university’s Society for Social Work and Community Welfare. Every semester, your Society plans and engages in nationwide community work such as helping build low-cost housing for less fortunate individuals in rural communities. Your Society has also recently been involved in raising funds for young children in East Malaysia, which will be used to build a school close to their community. Due to recent cutbacks in university funding support, however, you have had to scale back on the types of projects and services you can provide to those in need. University funding support for the Society has been cut from $8000 to $3000 a year. To make matters worse, many members are also leaving the Society to seek out other better-funded clubs to join. The cutback in university funding also means that you have had to make the difficult decision with other Society members to reduce the number of community engagements you can be a part of. The situation looks bleak, and you wonder how long it will be before the Society needs to disband – both due to a lack of funding, and lack of interest from university students. It is clear to you that this situation is a crisis.

Your Society’s leader has decided to hold an online video conference to discuss the Society’s crisis situation with you. The online video conference will now be streamed to you, and the leader will address you as team members of the Society for Social Work and Community Welfare.


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