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Symbolic threat affects negative self-conscious emotions

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Original Article

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Abstract

Self-conscious emotions are a distinct category of emotional responses that are rooted in social contexts. Previous findings suggest that negative self-conscious emotions might be elicited by a specific social factor, that is, symbolic intergroup threat. The present study tested the hypothesis that this is true, with three experiments conducted in the Chinese-context. In particular, the Mandarin words for shame (羞愧), guilt (内疚) and loss of face (丢脸) were examined. Symbolic threats were manipulated in all three experiments, with participants randomly divided into a symbolic threat condition and a control condition in each experiment. As expected, participants in the symbolic threat condition always reported more negative self-conscious emotions compared to participants in the control condition. These results suggest that symbolic intergroup threat can lead to self-conscious emotions as well as basic emotions, as was demonstrated by previous research.

There are two types of emotions according to most emotion theorists: one type is called basic emotions (e.g., sadness and joy) and the other type is called self-conscious emotions (e.g., shame and pride; Tracy & Robins, 2004). Both types of emotions probably evolved through natural selection to promote survival and reproductive goals, and the attainment of social goals (e.g., cooperation; Gilead, Katzir, Eyal, & Liberman, 2016). Although the basic emotions and self-conscious emotions of humans have the same primary functions (survival goals and social goals), self-conscious emotions, which have received relatively less attention than basic emotions, are more specialized than basic emotions (Tracy & Robins, 2004; Tracy, Robins, & Schriber, 2009). Tellingly, basic emotions appear within the first nine months of human infancy (Thompson, 2015), whereas self-conscious emotions, which are more cognitively complex than basic emotions, do not develop until 18 to 24 months after birth (Rochat, 2015). Furthermore, all six basic emotions have discrete, universally recognized facial expressions (Ekman, 2004), but researchers have yet to find distinct facial expressions for any of the self-conscious emotions. Finally, the most important characteristic of self-conscious emotions is that they require self-representations and self-awareness, which make them more socially oriented than the basic emotions (M. Lewis, Sullivan, Stanger, & Weiss, 1989). It is true that basic emotions such as sadness and fear can involve self-evaluative processes, but only self-conscious emotions require these processes.

Self-conscious emotions are fundamentally important to a wide range of psychological processes that evolved through natural selection and are common in our daily lives because they have served essential functional and adaptive roles in attaining, maintaining and communicating social status throughout our evolutionary history (Tracy & Matsumoto, 2008; Tracy, Shariff, & Cheng, 2010). When it comes to motivating complex normal and pathological human behaviors, self-conscious emotions are, in a sense, quite basic. Our every social act can be influenced by even a slight chance of feeling such self-conscious emotions as public shame or loss of face (Tracy & Robins, 2004). For example, inappropriate self-conscious emotions can reinforce maladaptive behavior, and poor behavioral regulation is associated with an impaired ability to interpret the self-conscious emotions of others (Beer, Heerey, Keltner, Scabini, & Knight, 2003). Additionally, self-conscious emotions (e.g., shame and guilt) during childhood predict risky behavior in young adulthood (Stuewig et al., 2015). In short, self-conscious emotions play a central role in motivating and regulating almost all thoughts, feelings and behaviors (Campos, 1995; Fischer & Tangney, 1995); hence, it is important to determine how self-conscious emotions contribute to our survival goals and social goals.

Symbolic threats involve threats related to a group's or an individual's worldview, morality, philosophy, ideology, belief system, values or religion (Stephan & Mealy, 2009). Previous studies provide evidence that symbolic threats can affect basic emotions, and those emotional reactions to symbolic threats are likely to be negative (Mackie, Devos, & Smith, 2000; Stephan, Renfro, & Davis, 2008). For example, heterosexuals may feel disgust when they see a gay man because the

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mate-choice view of heterosexuals is threatened (Cottrell & Neuberg, 2005; Rickett, 2006). Other people may feel angry when they perceive a threat to their in-group's reputation, which is another example of symbolic group threat. Moreover, fear can be induced when one perceives a threat to one's self-image (a form of symbolic individual threat; Smith, 1993; Stephan & Mealy, 2009).

The social self is central for maintaining social relationships that are essential to survival and reproduction, according to social self-preservation theory (Dickerson, Gruenewald, & Kemeny, 2004; Kemeny, Gruenewald, & Dickerson, 2004). Self-conscious emotions are experienced (particularly shame-related emotions) when the fundamental goal of maintaining a positive social self is threatened. Furthermore, according to the intergroup threat theory, symbolic threat can induce a number of emotional reactions (Stephan & Mealy, 2009). For example, threats directed at individual group members would be expected to evoke emotions tied to a concern for the self (e.g., for one's self-image), such as vulnerability and fear. Threats directed at the group as a whole, by contrast, would be expected to evoke emotions tied to a concern for the welfare of the group (e.g., for the group's reputation), such as resentment and anger (Doosje, Branscombe, Spears, & Manstead, 1998; Stephan & Mealy, 2009). Previous research suggests that self-conscious emotions may also be sensitive to symbolic threats, as evidenced by research on intergroup threat that indicates symbolic threats can also threaten one's social self (Legault & Green-Demers, 2012). This may happen because symbolic threats arouse feelings of inferiority and a belief that the in-group is at a disadvantage – for example, in international competition for status (Riek, Mania, & Gaertner, 2006) – although there is no direct evidence to verify this hypothesis. Thus, the current study investigated the potential relationship between symbolic threat and self-conscious emotions.

The positive nature of one's social self is correlated with positive self-conscious emotions such as pride, whereas the negative nature of one's social self is correlated with negative self-conscious emotions, such as shame, guilt and loss of face (M. Lewis, 1997). Undoubtedly, a symbolic threat may cause individuals to focus on the negative nature of their social self, which should elicit negative self-conscious emotions (Stephan & Mealy, 2009). Therefore, we assessed negative self-conscious emotions in the present study by focusing on the relationship between symbolic threat and negative self-conscious emotions. We already know individuals express negative basic emotions (e.g., anger and fear) under conditions of symbolic threat, and the present study was designed to determine whether symbolic threats can also elicit negative self-conscious emotions.

There are many important positive self-conscious emotions (e.g., pride) and negative self-conscious emotions (e.g., embarrassment and guilt; Muris & Meesters, 2014; Tangney, Miller, Flicker, & Barlow, 1996). In the present study, we focused on three common negative self-conscious emotions (i.e., shame, guilt, and loss of face), because previous research indicates these three negative self-conscious emotions might be elicited by threatening information (Stephan & Mealy, 2009). As the "premier social emotion", shame appears to be the most common emotional response to threats to the social self (Gausel, Leach, Vignoles, & Brown, 2012; McGregor & Elliot, 2005), which suggests that the activation of specific physiological systems accompanies shame in response to threats to the social self, and that these psychobiological responses are associated with specific behavioral reactions (e.g., submission and appeasement) to such threats (Libby, Valenti, Pfent, & Eibach, 2011). Guilt is especially common among Asian students when their academic performance is poor, as academic achievement is considered an obligation in Asian cultures (Tao & Hong, 2013); it is also elicited by personal shortcomings when true self-conceptions are primed (Vess, Schlegel, Hicks, & Arndt, 2014). In addition, people may experience feelings of guilt when faced with negative information about their group's past (Doosje et al., 1998; Swim & Miller, 1999). Previous research indicates that shame is the most likely emotional response to situations that threaten social relationships or one's social image (e.g., failing to meet the expectations of others, hurting others' feelings, or social-role violations), whereas guilt is the more likely emotional response to violations of social norms (e.g., lying, cheating, or neglecting a responsibility; see Keltner & Buswell, 1996; Tracy & Robins, 2006). While guilt and shame both involve negative self-evaluations, guilt entails renouncing a particular behavior, whereas shame typically entails a global negative evaluation of the entire self (H.B. Lewis, 1971). Loss of face is a special negative self-conscious emotion, which can be treated as one type of shame in Eastern cultures. Previous research has shown that guilt and shame are present in every society, but loss of face is present particularly in East Asian societies (Bedford, 2004; Ho, 1976). "Face" or "lian" refers to one's dignity, self-respect, feeling of social concern and the ability to fulfil social obligations in front of others. Other people come to recognize and accept a person's "face" or "lian" that the person claims for him or herself (Hwang, 1987). Face is very salient in East Asian social relations, whereas it has less social significance in more individualistic societies such as the United States. The importance of face in East Asian cultures lies in its function as a mechanism for maintaining group harmony. Loss of face, which is defined as a deterioration in one's social image, is regarded as a consequence of interpersonal conflict and a provocation for counter-attack. The depth of this emotion (loss of face) is related to the extent to which one believes face/lian is important (Brunner & Wang, 1988; Zane & Yeh, 2002). In light of the above research findings, the present study focused on the effect of symbolic threat on three negative self-conscious emotions —shame, guilt and loss of face — that may help people's emotional and social wellbeing.

We controlled for the degree of group identification in the present study because it is one of the most important variables influencing both symbolic threat and self-conscious emotions. On one hand, group identification has been shown to moderate the consequences of perceiving intergroup threat. Previous research suggests that group identification (the importance of the group to one's self concept) is not equal among all members of a group, and members with high group identification are more likely than those with low group identification to both perceive and react to symbolic threats from an out-group (Riek et al., 2006; Stephan et al., 2008) because they consider the in-group to be important to their self-identity. On the other hand, group identification plays an important role in terms of the consequences of negative self-conscious emotions. People are motivated to hold a positive view of their group, and they are more likely to do so when they identify more strongly with that group (Branscombe & Wann, 1991, 1994; Doosje, Ellemers, & Spears, 1995). If persons attach great importance to membership in a particular group (high identification), they are less likely to accept a negative characterization of that group when confronted with information that portrays their group negatively (Branscombe, Ellemers, Spears, & Doosje, 1999). As a result, members with high identification will seek ways to avoid experiencing negative self-conscious emotions (Doosje & Branscombe, 2003).

Three studies were conducted to assess directly the influence of symbolic threats on the negative self-conscious emotions of shame,

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guilt and loss of face in a Chinese-context. The purpose of Studies 1 and 2 was to explore whether symbolic threat influences self-conscious emotions in different conditions, and Study 3's purpose was to rule out the effect of social status on our results. Specifically, we examined the Mandarin words for shame (羞愧), guilt (内疚) and loss of face (丢脸). Symbolic threats were manipulated in all three experiments, in which participants with the same level of in-group identification were randomly divided into a symbolic threat condition or a control condition in each experiment. We hypothesized that participants in the symbolic threat condition would report more negative self-conscious emotions in all three experiments.

STUDY 1

Methods

Participants

An a priori power analysis (G*Power 3.1.9.2; Faul, Erdfelder, Buchner, & Lang, 2009) that used a large effect size (ES = 0.45) indicated that a minimum of 42 individuals (total sample size) would be needed for a power level of .81 (Cohen, 1992). Hence, 60 Chinese students (16 males) from Southwest University, who were between the ages of 18 and 23 years (M = 21.77 years, SD = 1.30), participated in this experiment. All of the students were right-handed, had normal or corrected-to-normal vision, and reported no history of neurological disorders. Participants were randomly assigned to the symbolic threat condition (30 participants) and the control condition (30 participants). The study adhered to the ethical standards for conducting research in the Declaration of Helsinki and was approved by the Review Board of Southwest University. Informed consent forms were completed by all the participants prior to commencing the study.

Stimuli and Procedures

Group identification measure. Group identification has been shown to moderate the consequences of perceiving intergroup threat (Ellemers, Spears, & Doosje, 2002); therefore, we tried to ensure that all the participants had the same level of group identification. Thus, when the participants arrived at the laboratory, they completed a Chinese identity scale in which they rated eight items about their identification with China (α = .881) on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*; e.g., "It is very important to me to be Chinese").

Threat induction and manipulation. Two articles were used to create the threat versus control conditions. Participants in the symbolic threat condition read an article that mentioned Japanese culture was more influential than Chinese culture in North America, whereas participants in the control condition read an article about next week's weather. After they finished reading, their sense of symbolic threat was measured by the question: "How much symbolic intergroup threat did you feel from Japan towards China after reading the article?" The response options ranged from 0 to 6: 0 = *not at all*, 6 = *very much*.

Negative self-conscious emotions. Following the symbolic threat manipulation check, the participants in both conditions were asked to rate the intensity of their personal negative self-conscious emotions (i.e., guilt, shame and loss of face) while they were reading the article on a 7-point scale (0 = *not at all*, 6 = *very much*); the Mandarin words for guilt (内疚), shame (羞愧), and loss of face (丢脸) were used. In order to reduce participants' awareness of the study's purpose, they were also asked to rate nine other emotions (e.g., depression and anger), which were used as distracters (Kitayama, Mesquita, & Karasawa, 2006).

Results

Identification Measure

The mean score for Chinese identity was 5.73 (SD = 0.89) for all the participants (N = 60), and no significant difference was found between the symbolic threat condition (M = 5.92, SD = 0.78) and the control condition (M = 5.54, SD = 0.96), $t(58)$ = 1.699, p = .095, d = 0.446, 95% CI [-0.068, 0.835].

Symbolic Threat Induction Manipulation Check

An independent t test showed that participants in the symbolic threat condition (M = 4.40, SD = 1.35) reported a higher sense of symbolic threat than did participants in the control condition (M = 1.37, SD = 1.50), $t(58)$ = 8.231, p < .001, d = 2.162, 95% CI [2.296, 3.371]. These results indicated that the manipulation of symbolic threat in the present study was successful.

Negative Self-Conscious Emotions

The Mandarin words for guilt (内疚), shame (羞愧) and loss of face (丢脸) were examined after participants finished reading the articles. We analyzed group differences in negative self-conscious emotions using a multivariate analysis of covariance (MANCOVA), which included group identification as a covariate. As expected, the MANCOVA revealed there was a significant difference between the symbolic threat group's mean on negative self-conscious emotions and the control group's mean, $F(1,57)$ = 53.762, p < .001, η_p^2 = .485, 95% CI [1.702, 2.981]. Specifically, participants in the symbolic threat condition reported a greater sense of guilt (M = 2.80, SD = 1.88) than did the participants in the control condition (M = 0.27, SD = 0.64), $F(1,57)$ = 46.673, p < .001, η_p^2 = .450, 95% CI [1.810, 3.311]. A sense of shame was also higher for participants in the symbolic threat condition (M = 2.70, SD = 1.68) than participants in the control condition (M = 0.43, SD = 0.86), $F(1,57)$= 39.987, p < .001, η_p^2 = .406, 95% CI [1.509, 2.933]. Similarly, we found a greater sense of loss of face among participants in the symbolic threat condition (M = 2.57, SD = 1.91) than participants in the control condition (M = 0.37, SD = 0.81), $F(1,57)$ = 33.064, p < .001, η_p^2 = .367, 95% CI [1.461, 3.023].

We conducted the same MANCOVA for the nine other emotions (e.g., depression and anger) as "distractors". There were significant differences between the symbolic threat group and the control group on five of the other emotions (dispirited, frustration, angry, self-esteem, and sympathy; all ps ≤ .003), but no significant effect emerged for the other four emotions (respect, friendly feelings, pride and superiority; all ps > 0.067).

Discussion

As expected, negative self-conscious emotions were experienced by individuals who perceived symbolic threat. We conducted Study 2, in which the symbolic threat between two other countries was manipulated in order to replicate the findings of Study 1. We hypothesized we would obtain the same results observed in Study 1.

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STUDY 2

Methods

Participants

The aim of Study 2 was to replicate the effect of symbolic threat on negative self-conscious emotions observed in Study 1 by testing a similar number of participants. A total of 51 Chinese students (14 males) from Southwest University, who were between 18 and 23 years ($M = 20.88$, $SD = 1.53$), took part in this experiment. All were right-handed, had normal or corrected-to-normal vision, and reported no history of neurological disorders. Participants were randomly assigned to the symbolic threat condition (26 participants) or the control condition (25 participants). The ethical standards for conducting the research were followed in line with the Declaration of Helsinki, and the study's protocol was approved by the Research Review Board of Southwest University. Informed consent forms were completed by all the participants prior to the commencement of the study.

Stimuli and Procedures

Group identification measure. The eight-item Chinese identity scale used in Study 2 was the same as that used in Study 1.

Threat induction and manipulation. Two articles were used to create the threat and control conditions. Participants in the symbolic threat condition read an article titled "American culture has far more influence than Chinese culture", which made the point that the current global influence of American culture is greater than that of Chinese culture. Participants in the control condition read an article about the weather during the next week. After participants finished reading the article, their sense of symbolic threat was measured by the question: "How much intergroup threat did you feel from America towards China after reading the article?" The response options ranged from 0 to 6; 0 = *not at all*, 6 = *very much*.

Negative self-conscious emotions. The measures of negative self-conscious emotions used in Study 2 were the same as those used in Study 1.

Subjective relative socioeconomic status. High status is one of the sources of intergroup threat, according to intergroup threat theory (Stephan, Ybarra, & Rios Morrison, 2009), and research indicates that the United States has a higher socioeconomic status than China (Swaine, 2013). As Study 2 was designed to examine the effect of intergroup threat on negative self-conscious emotions when the threatening out-group had a higher socioeconomic status than the in-group, we chose the United States to be the symbolic threatening group. After completing the negative self-conscious emotions measure, the participants completed the Subjective Relative Socioeconomic Status (SES) scale (Adler, Epel, Castellazzo, & Ickovics, 2000). A ladder with 10 rungs was given to every participant, and they were informed that the ladder represented where countries stand in the world. The countries located at the top of the ladder symbolized optimum conditions; for instance, the greatest jobs, the most money, and the best education. The countries located at the bottom of the ladder symbolized the opposite conditions; that is, they represent the worst jobs, the least money, and the worst education. Participants were asked: "If China is on the 6th rung, which rung of the ladder do you think would best represent the United States? Please place an X on that rung." Then, the participants were randomly assigned to the symbolic threat condition (26 participants) and the control condition (25 participants).

Results

Identification Measure

The mean score for Chinese identity was 6.01 ($SD = 0.60$) for all the participants ($N = 51$), and there was no significance difference between the symbolic threat condition ($M = 5.88$, $SD = 0.66$) and the control condition ($M = 6.16$, $SD = 0.50$), $t(49) = 1.687$, $p = .098$, $d = 0.482$, 95% CI [-0.611, 0.533].

Symbolic Threat Induction Manipulation Check

Participants in the symbolic threat condition reported a greater sense of symbolic threat ($M = 4.54$, $SD = 0.90$) than participants in the control condition ($M = 1.40$, $SD = 1.38$), $t(49) = 9.621$, $p < .001$, $d = 2.789$, 95% CI [2.483, 3.794]. These results indicated that the manipulation of symbolic threat was successful.

Negative Self-Conscious Emotions

We analyzed group differences in negative self-conscious emotions using a MANCOVA that included group identification and subjective relative socioeconomic status as covariates. As expected, the MANCOVA showed that there was a significant difference between the symbolic threat group's mean on negative self-conscious emotions and the control group's mean, $F(1,47) = 23.815$, $p < .001$, $\eta_p^2 = .336$, 95% CI [0.910, 2.187]. Specifically, participants in the symbolic threat condition reported a greater sense of guilt ($M = 1.96$, $SD = 1.68$) than the participants in the control condition ($M = 0.88$, $SD = 1.33$), $F(1,47) = 6.451$, $p = .014$, $\eta_p^2 = .121$, 95% CI [0.235, 2.029]. A sense of shame was also higher among participants in the symbolic threat condition ($M = 2.12$, $SD = 1.70$) than in the control condition ($M = 0.36$, $SD = 0.81$), $F(1,47) = 23.470$, $p < .001$, $\eta_p^2 = .333$, 95% CI [1.698, 2.658]. Finally, we found a higher sense of loss of face among participants in the symbolic threat condition ($M = 1.92$, $SD = 1.47$) than participants in the control condition ($M = 0.32$, $SD = 0.85$), $F(1,47) = 21.493$, $p < .001$, $\eta_p^2 = .314$, 95% CI [0.926, 2.345].

We conducted the same MANCOVA for the nine other emotions (e.g., depression and anger) as distractors. There were significant differences between the symbolic threat group and the control group on six of the other emotions (depression, frustration, anger, self-esteem, pride, superiority; all $ps \leq .013$), but no significant effect emerged for the other three emotions (respect, friendly feelings, and sympathy; all $ps > .067$).

Relative Status Measure

A one-sample t test revealed that all the participants thought the subjective relative socioeconomic status of the United States ($M = 8.25$, $SD = 0.87$) was higher than that of China ($M = 6.00$, $SD = 0.00$), $t(50) = 18.548$, $p < .001$, $d = 2.682$, 95% CI [2.011, 2.499].

Discussion

As expected, participants in the symbolic threat condition reported more negative self-conscious emotions than did participants in the control condition. Overall, Study 1 and Study 2 indicated that symbolic threat affected self-conscious emotions. However, subjective relative socioeconomic status was not measured in Study 1, and the symbolic threat out-group used in Study 2 had a higher social status than the in-group, so Study 3 explored how symbolic threat influences self-conscious emotions independent of the effect of

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social status. To do so, the symbolic threat posed to China by India, whose social status might be lower than that of China, was manipulated in Study 3.

STUDY 3

Method

Participants

Study 3 tested the effect of symbolic social threat on self-conscious emotions in a sample of participants similar to those studied in the first two experiments. Hence, 49 Chinese students (12 males) from Southwest University, who ranged in age from 18 to 22 years (M = 20.04 years, SD = 1.22), took part in this experiment. Participants were randomly assigned to the symbolic threat condition (25 participants) and the control condition (24 participants). All of the participants were right-handed, had normal or corrected-to-normal vision, and reported no history of neurological disorders. The ethical standards used in conducting the research were consistent with the Declaration of Helsinki and the research was approved by the Research Review Board of Southwest University. Informed consent forms were completed by all the participants before the study began.

Stimuli and Procedures

Group identification measure. The eight-item Chinese identity scale used in Study 3 was the same as that used in Studies 1 and 2.

Symbolic threat induction. Two articles were used once again to create the threat and control conditions. The participants in the symbolic threat condition read an article that stated that Indian culture was more influential than Chinese culture in the world. The participants in the control condition read an article about next week's weather. The participants' sense of symbolic threat was measured after they read the article by the question: "How much symbolic intergroup threat did you feel from India towards China after reading the article?" The response options ranged from 0 to 6; 0 = *not at all,* 6 = *very much*.

Negative self-conscious emotions. After the symbolic threat manipulation check, the participants finished the measurement of negative self-conscious emotions, which were the same as that used in Studies 1 and 2.

Subjective relative socioeconomic status. As previous research indicates India has a lower socioeconomic status than China (Pant, 2007), we chose India to be the out-group that posed a symbolic threat to examine the effect of intergroup threat on negative self-conscious emotions in Study 3. Following the measure of negative self-conscious emotions, participants completed the Subjective Relative Socioeconomic Status (SES) scale (Adler et al., 2000).

A ladder with 10 rungs was given to every participant, and they were informed that the ladder represented where countries stand in the world. The countries at the top of the ladder symbolized optimum condition; for instance, the greatest jobs, the most money, and the best education. The countries located at the bottom of the ladder symbolized the opposite conditions; that is, they represent the worst jobs, the least money, and the worst education. Participants were asked: "If China is on the 6th rung, which rung of the ladder do you think would best represent India? Please place an X on that rung."

Results

Identification Measure

The mean score for Chinese identity was 6.00 (SD = 0.52) for all the participants (N = 49), and there was no significant difference between symbolic threat condition (M = 5.87, SD = 0.60) and the control condition (M = 6.13, SD = 0.39), $t(47) = 1.779$, $p = .082$, $d = 0.519$, 95% CI [-0.548, 0.034].

Symbolic Threat Induction Manipulation Check

Participants in the symbolic threat condition reported a greater sense of symbolic threat (M = 3.44, SD = 0.96) than participants in the control condition (M = 1.71, SD = 1.40), $t(47) = 5.071$, $p < .001$, $d = 1.451$, 95% CI [1.045, 2.419]. These results indicate that the manipulation of symbolic threat was successful.

Negative Self-Conscious Emotions

We analyzed group differences in negative self-conscious emotions using a MANCOVA that included group identification and subjective relative socioeconomic status as covariates. As expected, the MANCOVA found a significant difference between the symbolic threat group's mean on negative self-conscious emotions and the control group' mean, $F(1, 45) = 22.227$, $p < .001$, $\eta_p^2 = .331$, 95% CI [0.943, 2.351]. The participants in the symbolic threat condition (M = 2.16, SD = 1.62) reported more guilt than participants in control condition (M = 0.88, SD = 1.08), $F(1,45) = 11.895$, $p = .001$, $\eta_p^2 = .209$, 95% CI [0.592, 2.254], as well as more shame (M = 2.32, SD = 1.68) than participants in the control condition (M = 0.54, SD = 0.93), $F(1,45) = 20.181$, $p < .001$, $\eta_p^2 = .310$, 95% CI [1.001, 2.628]. Finally, they reported a greater loss of face (M = 2.04, SD = 1.67) than did the participants in the control condition (M = 0.42, SD = 0.78), $F(1,45) = 18.627$, $p < .001$, $\eta_p^2 = .293$, 95% CI [0.909, 2.499].

We conducted the same MANCOVA for the nine other emotions (e.g., depression and anger) as distractors. There were significant differences between the symbolic threat group and the control group on the three other emotions (depression, frustration, and self-esteem; all ps $\leq .028$), but no significant effect was found for other six emotions (anger, pride, superiority, respect, friendly feelings, and sympathy) (all ps $> .115$).

Relative Status Measure

All participants thought the subjective relative socioeconomic status of India (M = 3.69, SD = 1.02) was lower than that of China (M = 6.00, SD = 0.00), $t(48) = 15.753$, $p < .001$, $d = 3.203$, 95% CI [2.012, 2.600].

Discussion

The results of Study 3 were consistent with those of Studies 1 and 2, with self-conscious emotions emerging in the symbolic threat condition rather than the control condition. Moreover, the results of Experiment 3 demonstrated that guilt, shame and loss of face was experienced in the symbolic threat group, even when the threat was from an out-group with lower social status.

General Discussion

The purpose of this study was to investigate the effects of symbolic threat on negative self-conscious emotions. Study 1 found that symbolic threat could elicit negative self-conscious emotions and Study 2 replicated the findings of Study 1, in that negative self-conscious emotions emerged in both studies when participants

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felt a symbolic threat from a high-status out-group. The results of Study 3 showed that participants felt negative self-conscious emotions even when the symbolic threat came from a lower status out-group. Taken together, these results indicate that symbolic threat elicits negative self-conscious emotions, such as guilt, shame and loss of face, regardless of the status of the threatening out-group.

The present study aimed to investigate the effect of symbolic threat on negative self-conscious emotions. Our results suggest that intergroup symbolic threat can facilitate the emergence self-conscious emotions at the group level. Based on self-categorization theory and social identity theory, people's emotions can be influenced by the group to which they belong, due to the people's motivation to share their identity with other group members (Tajfel & Turner, 1986; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987; Mackie et al., 2000). Where there is shared identity, there is a shift towards cognitive and effective co-action among group members, which leads people to treat group identity as a part of their self-identity (Doosje, Branscombe, Spears, & Manstead, 2006). Negative conscious emotions emerge when this shared group identity is threatened (Branscombe & Wann, 1991, 1994; Doosje et al., 1995), as observed in the present study.

The feeling that one has failed in one's personal responsibilities is one of the main types of subjective guilt (内疚) in China. It is usually aroused in relation to one's own abilities and it is experienced with respect to things that one does, and not the way one is. For example, guilt may arise when one could fulfil an obligation, but does not do so because of lack of time, tools or effort. A group member may think s/he has an obligation to protect the in-group, so guilt for the in-group emerges if this obligation is not carried out when the in-group is threatened. Furthermore, the more interdependent individuals feel with others in their group, the more guilt should be triggered when the group is threatened, especially in family or friendship groups (Lickel, Schmader, Curtis, Scarnier, & Ames, 2005; Schmader & Lickel, 2006). Given the high degree of Chinese identity observed in the present study, it makes sense that our participants reported guilt under the symbolic threat condition.

If one discovers shame (羞愧) as a negative aspect of oneself, it raises thoughts about how to improve or change to be better in the future. The main cause of shame is the violation of a self-expectation that results in harming others. If a symbolic threat elicits a shame response, it should produce an automatic and involuntary emotional reaction that is accompanied by physiological and behavioral responses designed to address symbolic threat. Symbolic threat in the present study probably reminded participants that their in-group had a characteristic that was worse than that of the out-group, which might have made them feel worse than a member of a threatening out-group. Therefore, they might have been ashamed that they were not as good a group member as they should be. This feeling also includes the perception that one is not performing well and is harming the in-group and other in-group members.

Loss of face (丢脸) is a special negative self-conscious emotion in Chinese culture. Face, or lian, is a social product that refers to one's dignity, self-respect, feeling of social concern and the ability to fulfill social obligations in front of other people (Bedford, 2004). The depth of this emotion is relative to the extent to which one believes that face/lian is valuable. Importantly, loss of reputation or standing in the eyes of other people is the central issue with loss of face. As people are motivated to have a good opinion of their group, symbolic threat should damage the reputation of the group and the group member, which might be the reason why participants felt loss of face in the symbolic threat condition.

Previous studies have mostly focused on the negative self-conscious emotions in perpetrator groups. The current study demonstrated that members of a victimized group also experience self-conscious emotions when threatened. It is important to note that our experiments studied symbolic group threat, so we do not know whether negative self-conscious emotions would be elicited by individual symbolic threats. Furthermore, positive self-conscious emotions were not measured in the present studies, so future research would benefit from exploring the effect of symbolic threat on positive self-conscious emotions. Future research should also focus on the role of identification and public exposure on the experience of negative self-conscious emotions in the context of intergroup threat. Previous research found in-group identification was an important moderator of the experience of vicarious shame and guilt (Lickel, Schmader, & Spanovic, 2007). However, our research could not assess the effect of group identification on negative self-conscious emotions, as all the participants had the same level of identification with the in-group. However, not everyone is equally likely to experience feelings of negative conscious emotions when faced with negative information about their group's past, according to social identity theory (Tajfel & Turner, 1986). It would be worthwhile for future research to study participants with different levels of group identification in a symbolic threat condition.

Conclusions

In summary, the present study provides evidence that negative self-conscious emotions can be affected by symbolic intergroup threat within the context of a collectivist culture. These results provide support for the notion that symbolic intergroup threat can, indeed, lead to not only basic emotions but also lead to self-conscious emotions.

Supplementary material. To view supplementary material for this article, please visit https://doi.org/10.1017/prp.2020.3

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Data accessibility. The datasets analyzed for this research can be found in the electronic supplementary material.

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