Can you forgive? It depends on how happy you are

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Abstract

This paper examined how individual group status and happiness influence forgiveness. In Study 1, happiness was treated as a trait difference: highly happy people, compared with very unhappy people, were found to be more willing to forgive murderers. More important, an interaction effect between happiness and group status on forgiveness was found, that is, highly happy people tended to be more forgiving when either ingroup or outgroup members were killed; unhappy people, however, tended to be less forgiving about murder when ingroup rather than outgroup members were killed. In Study 2, happiness was treated as an emotional state difference: happiness, rather than sadness, was found to bring greater forgiveness. Moreover, consistent with the interaction effect displayed in Study 1, happy participants tended to forgive more when ingroup or outgroup members were hurt; sad participants tended to forgive less when ingroup members rather than outgroup members were hurt. Implications for connections between happiness, group membership, and forgiveness are discussed.

Key words: Happiness, forgiveness, group status.
INTRODUCTION

On Aug 23, 2010, in Manila, the Philippines, Rolando Mendoza, a 55-year-old senior inspector armed with an M-16, hijacked a bus carrying 21 Hong Kong tourists. The hostage drama and resulting bloody siege killed eight Hong Kong hostages, deeply upsetting Hong Kong citizens. The Hong Kong government issued a “black” alert for travelers to the Philippines and demanded a thorough investigation of the tragedy. Filipinos, however, were much less disturbed by the incident; some even took pictures at the scene for fun. Worse still, when Filipino President Benigno Aquino III appeared on TV to address the incident, he wore a “smiling” face, further upsetting Hong Kong citizens for the blatant disregard of eight innocent lives. Hong Kong was outraged by the injustice, but Filipinos seemed willing to dismiss it.

From the perspective of social identity theory (Tajfel & Turner, 1979), Hong Kong citizens were naturally unwilling to forgive the murder person of members of their ingroup (Brewer, 2007). Coincidentally, in looking for the causes of the discrepancy between attitudes of citizens of Hong Kong and the Philippines, we learned that the latest Happy Planet Index 2.0 survey ranks the Philippines as 25th in general happiness, but Hong Kong falls to number 102 (New Economics Foundation, 2012). Thus, we wondered whether the general unhappiness of Hong Kong residents might influence their inability to move beyond the incident, and, by extension, whether happiness in general influences forgiveness capacities. In addition, we wondered whether group membership exerts an effect.

VICTIMS’ GROUP STATUS AND FORGIVENESS

Again, social identity theory explains that people tend to identify with members of their group to enhance their positive self-views. Through “in-group favoritism,” they identify with their
social or ethnic groups and prefer ingroup members to outgroup members at times of conflicts (e.g., Tajfel & Turner, 1986). Unsurprisingly, Hong Kong citizens had ongoing anger toward the perpetrator, while Filipinos could more easily forgive and forget.

Previous studies using the social identification approach have well-documented the dynamics of forgiveness between different social groups. For example, an investigation into how categorization influences victimized group response toward descendants of past perpetrators found that Jews were more forgiving toward Germans when the Holocaust was framed as a reflection of what humans might do to others rather than what Germans did to Jews; that is, perpetrators and victims both belonged to the same human group rather than belonging to different groups (Wohl & Branscombe, 2005). Similarly, an experimental manipulation of group perceptions showed that intergroup bias is reduced when former outgroup members are re-categorized as ingroup members (Gaertner, Dovidio, Anastasio, Bachman & Rust, 1993; Gaertner, Mann, Murrell & Dovidio, 1989). These results are usually interpreted to indicate that intergroup understanding and forgiving is increased when group categorizations are degraded.

Therefore, the group status effect includes a corollary: as victimized members have more salient ingroup status, ingroup members are likely to show decreased forgiveness toward those who harm them. However, the association between group status and forgiveness might be influenced by individuals’ overall feelings of happiness. In the following section, we look at the connection between happiness and forgiveness.

HAPPINESS AND FORGIVENESS

Happiness represents positive human feelings (Fordyce, 2005), and forgiveness demonstrates
positive thinking and human virtue (McCullough, Bellah, Kilpatrick & Johnson, 2001; Peterson & Seligman, 2004). Happiness and forgiveness are apparently positively related (Emmons & McCullough, 2003; Friedman, 1992; Maltby, Day & Barber, 2005; Toussaint & Friedman, 2009; Worthington, Berry, Parrott, Plante & Sherman, 2001). For example, happiness, both short- and long-term, has been positively associated with forgiveness (Maltby et al., 2005). Forgiveness has been negatively correlated with negative effects such as anger and sadness (Coyle & Enright, 1997; Huang & Enright, 2000). Analogously, both positive and negative emotions mediated the relationship between forgiveness and well-being (Toussaint & Friedman, 2009). Moreover, a crucial factor for choosing forgiveness has been identified: “for the sake of happiness” (Younger, Piferi, Jobe & Lawler, 2004).

Consistent with the above survey studies, experimental research on mood-cognition connection also provides us insights into how happiness may influence forgiveness. Past research indicates that happy individuals could feel assured that their environment is safe and unproblematic, whereas sad individuals might feel the need to be alert to unusual or problematic threats (Schwarz, 1990). Therefore, compared with sad moods, people who enjoy happy moods tend to stay in that “comfortable zone” and to be less motivated toward systematic thought (Wegener, Petty & Smith, 1995). They have less cognitive capacity for information processing (Mackie & Worth, 1989; Schwarz, Bless & Bohner, 1991), and rely more on heuristics (Park & Banaji, 2000). In other words, happiness decreases environmental sensitivity while sadness increases it. Thus, it is not surprising to find that happy people show mindlessness to intrusion errors (Bless, Clore, Schwarz, Golisano & Rabe, 1996).

Those studies suggest that happy people tend to use more effortless processing, to be less
sensitive to circumstances, and to detect problematic surroundings less acutely; sad people, however, do exactly the opposite (Bless et al., 1996; Forgas, Laham & Vargas, 2005; Harris & Thoresen, 2006). Thus conceived, as they are supposed to be less sensitive to circumstances, happy people may tend to ignore the harm caused by perpetrators and, be more forgiving toward perpetrators. In contrast, sad people, as they are more sensitive to circumstances, are particularly less likely to forgive perpetrators.

**GROUP STATUS, HAPPINESS, AND FORGIVENESS**

Aforementioned forgiveness effects have been identified in previous research. The group status effect indicates ingroup favoritism: people are less likely to forgive if the perpetrator harms ingroup members. The mood effect indicates that happy people are more likely to be forgiving. We combine the two effects in analyzing whether happy or sad people will show different forgiveness patterns depending on whether the victims are ingroup or outgroup members. Little empirical research has directly investigated this issue. We assume that given happiness tends to decrease environmental sensitivity, it would weaken the group status effect on forgiveness, that is, happy people would be more likely to forgive the perpetrator no matter whether the victim is an ingroup or outgroup member; sadness, however, would strengthen the group status effect on forgiveness, namely, sad people would be less likely to forgive transgression against an ingroup member than against an outgroup member.

In summary, we attempt to investigate whether people with different happiness levels and different group status, ingroup or outgroup, show different levels of forgiveness. We undertook two studies in our efforts to better understand the relations between happiness, group status, and forgiveness.
STUDY 1

As mentioned earlier, Hong Kong citizens were greatly upset when eight Hong Kong tourists were killed in Manila in a hostage siege on August 23, 2010. The aftermath of that incident prompted our desire to compare how Hong Kong individuals with different happiness levels would forgive a similar mass murder case when ingroup or outgroup members were killed.

In Study 1, we measured general happiness levels and investigated willingness to forgive serious crime. We used newspaper reports to extract cases of murder of both Hong Kong citizens and Filipinos, and asked Hong Kong participants to report their willingness to forgive both crimes. We expected that happier participants would be more likely to forgive perpetrators (Emmons & McCullough, 2003; Friedman, 1992). Furthermore, we also expected to find the interaction effect between happiness and group status on forgiveness.

Participants

We recruited 99 Hong Kong college students from the City University of Hong Kong (52 females, 45 males, 2 with missing gender records; average age = 29.13; SD = 6.02). Participants received partial course credit for their participation.

Procedure and measurement

When participants arrived at the testing site, they read and signed the informed consent form. Then they completed a set of questionnaire that included a scale for happiness and a scenario (the order was happiness first and scenario second).

Happiness

Happiness was measured by the one-item scale developed by Fordyce (1973, 2005), which was an eleven-point scale with a brief description for each point. For example, 0 = Extremely
unhappy (utterly depressed, completely down.), 7 = Mildly happy (feeling fairly good and somewhat cheerful.), 10 = Extremely happy (feeling ecstatic, joyous, fantastic!). Although it is a quite simple tool, it has demonstrated strong reliability and validity (for a review, see Fordyce, 2005).

Mass murder scenarios

We selected two comparable tragedies that happened in the Philippines: (1) the killing of eight Hong Kong tourists mentioned earlier; (2) the killing of twelve Filipino journalists in a local election in Maguindanao. We extracted both descriptions from newspaper reports and presented them to participants as follows.

Scenario 1. Hong Kong tourists were killed. On Aug 23, 2010, in Manila Philippines, 55-year-old Senior Inspector Rolando Mendoza armed with an M-16 seized a bus with 21 Hong Kong travelers in an apparent attempt to get his job back. In the end, eight of the Hong Kong hostages were killed in the bloody siege (source: CNN).

Scenario 2. Filipino journalists were killed. On Nov 23, 2009, in Maguindanao Philippines, a police inspector leading a group of gunmen ambushed a group of journalists who were traveling to attend a governorship election. In the end, twelve journalists were murdered (source: BBC).

Our participants were local Hong Kong people, so they would perceive the Manila siege victims as ingroup members and the Filipino journalist victims as outgroup members. We assigned participants randomly to either the ingroup or outgroup condition. After participants read the brief newspaper report, their forgiveness toward the murder were measured by four items (i.e., “you will forgive this murder,” “you will try to forget this tragedy and let it go,”
“the murder should take full responsibility for the tragedy,” “the murder is evil”) on a seen-point scale from 1 = totally disagree to 7 = totally agree. The last two items were reverse-scored, resulting higher score means more forgiveness. The Cronbach’s alpha = 0.82.

Results

Prior to analysis, all variables were centered for analysis of regression and simple slope plot. We also created a dummy variable for group status by taking on the value 0 and 1 (ingroup victims = 0, outgroup victims = 1).

Multiple regressions were conducted to test our hypotheses. Consistent with previous findings, results showed that participants tended to show more forgiveness when they were happy (b = 0.28, p < 0.001), or when the victims were outgroup members (b = 0.13, p < 0.05). More importantly, happiness was found to moderate the relationship between group status and forgiving (b = -0.20, t = -2.59, p < 0.05, ΔR² = 0.02, ΔF = 6.69, p < 0.05). Table 1 displays the regressions in detail.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>3.51</td>
<td>3.53</td>
</tr>
<tr>
<td>Group status</td>
<td>0.13*</td>
<td>0.13*</td>
</tr>
<tr>
<td>Happiness</td>
<td>0.28***</td>
<td>0.26***</td>
</tr>
<tr>
<td>Group status × happiness</td>
<td></td>
<td>-0.15*</td>
</tr>
<tr>
<td>ΔR²</td>
<td></td>
<td>0.02</td>
</tr>
<tr>
<td>ΔF</td>
<td></td>
<td>6.69*</td>
</tr>
</tbody>
</table>

Note: * p < 0.05; *** p < 0.001.

We examined the interaction by testing the relationship between group status and forgiving at high (one SD above the mean) and low (one SD below the mean) values of happiness (Aiken & West, 1991).² The analysis revealed that higher and lower happiness affected the relationship
between group status and willingness to forgive. Figure 1 presents the plotted interaction.

![Graph showing the plotted interaction effect of group status and happiness on forgiving.](image)

**Fig. 1.** The plotted interaction effect of group status and happiness on forgiving.

**Discussion**

Consistent with previous literature, we find forgiving to be positively associated with happiness. More important, the interaction suggests that the group status effect on forgiveness varies across happiness levels. Namely, unhappy individuals showed a clear group status effect on forgiveness; they were significantly less forgiving when the victims were ingroup members than when the victims were outgroup members, t(53) = 3.84, p < 0.001. However, happier individuals demonstrated no group status effect on forgiveness: they forgave the perpetrator whether the victims were ingroup or outgroup members, t(42) = 0.15, p = 0.89.

However stimulating the findings, Study 1 had shortcomings. Both scenarios were real events excerpted from newspapers. Although we tried to balance the scenarios, they were imperfectly
matched. For example, the incidents had an unequal number of victims. Also, in the second scenario, perpetrators and victims belonged to the same group. Those drawbacks could undermine Study 1. Thus we conducted Study 2 to address the concerns.

STUDY 2

To offset Study 1 deficiencies, in Study 2 we fabricated two scenarios to ensure that all information except group status was equal. We manipulated mood states rather than measuring general happiness and thus directly examined whether happiness or sadness would influence willingness to forgive.

First, we manipulated participants’ mood states so that they would feel happy, neutral, or sad. Then we showed them a scenario in which an ingroup or outgroup member was harmed. After reading the scenario, participants rated by degrees their willingness to forgive the perpetrator. Through this 3 9 2 between subject design, we expected to find that: (1) happy participants were more likely to forgive than sad participants; (2) participants were less likely to forgive when ingroup members were hurt than when outgroup members were hurt; and (3) group status and happiness experience would interact: that is, compared with the happy group, the sad group would demonstrate less forgiveness when ingroup members were hurt but not when outgroup members were hurt.

Participants

We recruited 152 undergraduates (53 females, 99 males; average age = 19.91, SD = 1.71) from The Chinese University of Hong Kong. The participants are college sophomores major in psychology, and they are all local Hong Kong people. We paid each participant HK$50 (%US$6.50) show up fee.
Procedure and measurement

When participants arrived at the testing site, they read and signed the informed consent form.

Happiness manipulation. As a cover story, we introduced our experiment saying, “We are interested in the relationship between personal handwriting and judgment, so please hand-copy the following paragraph and answer the questions below.” Participants were randomly distributed to three hand-copy conditions: happy (description of a graduation ceremony day), sad (description of a mother’s death), and neutral (description of a normal working day) (the materials are available from the corresponding author upon request). Following the hand-copy task, for the manipulation check we asked participants to rate their current emotional state on a seven-point Likert scale (1 = very unhappy, 7 = very happy).

Forgiving the perpetrator. After the hand-copy task, participants read a scenario about a conflict between a passenger and a taxi driver in which the taxi driver badly hurt the passenger. We prepared two versions of the scenario. In one, the student victim attended The Chinese University of Hong Kong (ingroup condition); in the other, the student attended the City University of Hong Kong (outgroup condition):

Last week, Peter, a student at [the Chinese University of Hong Kong (CUHK)/City University of Hong Kong (CityU)] took a taxi to a friend’s home for a party. After arriving at the destination, Peter was convinced that the taxi driver had taken an indirect route and a serious quarrel erupted. The driver hit Peter several times, sending him to hospital where doctors found that he suffered a broken nose and a concussion.

Half of the participants were randomly assigned to the ingroup condition, and the other half were randomly assigned to the outgroup condition. Following the scenario, the four items
used in Study 1 were used hereby to measure participants’ forgiveness toward the perpetrator (the word “murder” was replaced with “driver”). The Cronbach’s alpha = 0.84. To insure that participants noticed the name of the university used in the scenario, as a manipulation check we asked them to recall which university the victim attended.

Results

Manipulation check. One-way ANOVA was used to analyze participants’ rating of emotional states (happy, sad, and neutral). Results showed a significant difference in happiness states F(2, 149) = 52.34, p < 0.001, with happy (M = 5.04, SD = 1.24), neutral (M = 4.02, SD = 0.94), and sad (M = 2.85, SD = 1.07). The post hoc test indicated the three manipulations had significantly different outcomes, suggesting that our happiness manipulation succeeded. For the check of manipulation on group status, all participants reported the correct university name for the student’s affiliation.

Group status and happiness effects on forgiving. Forgiveness ratings were submitted to a 2 (ingroup vs. outgroup) x 3 (happy vs. neutral vs. sad) analysis of variance. Happiness showed a significant main effect F(2, 146) = 4.82, p < 0.01, η² = 0.06, indicating the happy participants were more forgiving than were sad participants. Group status showed a significant main effect as well F(1, 146) = 7.59, p < 0.01, η² = 0.04, suggesting that participants were less forgiving when the harmful act hurt an ingroup member than they were when it hurt an outgroup member. More important, happiness and victim group status also showed significant interaction F(2, 146) = 3.29, p < 0.05, η² = 0.04. Figure 2 displays the interaction effect between happiness and group status on forgiveness.
In addition, simple effect test was conducted to reveal the degree to which happiness is differentially effective at each level of group status (i.e., ingroup victims vs. outgroup victims). As expected, happy participants demonstrated more forgiveness, but with insignificant differences between sympathy for ingroup victims and outgroup victims \( (F(1, 146) = 1.75, p = 0.19, \eta^2 = 0.01, \text{ns}, \text{for ingroup: } M = 3.93, \text{SE} = 0.22, \text{for outgroup: } M = 4.35, \text{SE} = 0.23) \). Sad participants, however, demonstrated significantly less forgiveness when ingroup victims were hurt than when outgroup victims were hurt \( (F(1, 146) = 12.95, p < 0.001, \eta^2 = 0.08, \text{for ingroup: } M = 2.96, \text{SE} = 0.23, \text{for outgroup: } M = 4.12, \text{SE} = 0.23) \). Participants with the neutral emotion showed almost the same forgiveness patterns \( (F(1, 146) = 0.004, p = 0.95, \eta^2 < 0.001, \text{ns}, \text{for ingroup: } M = 3.52, \text{SE} = 0.24, \text{for outgroup: } M = 3.50, \text{SE} = 0.24) \). In other words, the group status effect on forgiving varied across happy, sad, and neutral feelings.

*Fig. 2. The interaction effect of group status and mood on forgiveness.*
Discussion

Study 2 used a more precise scenario to replicate the findings of Study 1 and confirmed that happy people tend to be more forgiving no matter the victim’s identity. In contrast, sad people tend to be less forgiving when the victims are ingroup rather than outgroup members.

GENERAL DISCUSSION

Although forgiveness has been a hot issue in positive psychology, few studies have identified when and how people are willing to forgive (e.g., Wohl & Branscombe, 2005). In this research, we attempted to investigate the joint effects of group status and happiness on the willingness to forgive. In Study 1, we find that unhappy people tend to be less forgiving when the victims of killings are ingroup members rather than outgroup members. Highly happy people, however, tend to be more forgiving no matter whether the victims are ingroup or outgroup members. We replicate the findings of Study 1 in Study 2 by manipulating participants’ happiness levels and find that the effect can be obtained despite chronic happiness levels. Simply and subtly priming the temporary mood state is sufficient to arouse forgiveness sentiments.

Bright and dark sides of happiness on forgiving

Forgiveness, a crucial human virtue, could enrich our lives by promoting well-being and health (Bono & McCullough, 2006; Maltby et al., 2005; Sastre, Vinsonneau, Girard & Mullet, 2003; Toussaint & Friedman, 2009). Forgiveness could also facilitate social harmony by alleviating the intensity of intergroup relationships (Tam, Hewson, Cairns, Tausch, Maio & Kenworthy, 2007; Wohl & Branscombe, 2005). Thus, facilitating forgiveness is undoubtedly the bright side of happiness. Particularly, happy people tend to demonstrate greater forgiveness even when outgroup members murdered ingroup members. The prominent effect of happiness is
compatible with previous research assuming that positive mood broadens social categorizations (Isen & Daubman, 1984; Isen, Niedenthal & Cantor, 1992), and generates prosocial outcomes (Isen, 2000).

Is it always good for happy people to forgive crimes whatever the group status of victims? The answer is somewhat complex. We have indicated the benefits of forgiveness and the positive effects of reducing intergroup bias, which would indicate that the question can be answered only with a yes (Gaertner et al., 1993). However, an evolutionary perspective might suggest that the answer could be no. Doubtless, human beings are highly adapted to group living. Perceiving group differentiation is crucial for survival because groups are usually formed for competing over scarce resources or for accomplishing group goals (Brewer, 1991, 2007). The evolutionary perspective indicates that people basically engage in cooperation or competition (Kramer & Brewer, 1984), trust or distrust (Tanis & Postmes, 2005). Hence, blindly forgiving crimes toward ingroup or outgroup members might be maladaptive for human survival, at least from the evolutionary perspective.

Sadness helps to detect the harms

Compared with happy emotion, sad emotion seems to be helpful for human beings’ survival, by leading people to forgive less when victims were ingroup members than when victims were outgroup members. This indicates that for people with sad emotion, harms could be sensitively differentiated in terms of toward ingroup members or outgroups members. Such ability of detecting group boundary is consistent with previous findings of mood effect on cognition. For example, studies about mood effect on memory demonstrated that people who were in a sad mood have higher discrimination ability (e.g., Forgas, Goldenberg & Unkelback, 2009; Forgas,
Laham & Vargas, 2005). In another study, people in bad moods were better able to detect deception than were people in good moods (Forgas & East, 2008). Similarly, people in bad moods tended to embrace more detailed schemas and to process information more systematically (Bless, 2001). In contrast, happy people tended to show mindlessness to intrusion errors (e.g., Bless et al., 1996). Therefore, substantial convergent evidence is supportive to the notion that sadness leads people to show less forgiveness than does happiness, especially when the victims are ingroup members.

**Theoretical and practical implications**

To our knowledge, little work has been done to experimentally investigate forgiving behaviors combining group status and happiness. Our findings have important theoretical and practical implications. Theoretically, past research on social identity demonstrated that ingroup favoritism matters in social judgment (Mackie, Devos & Smith, 2000; Smith, 1993). Our results suggest that unhappy individuals could show exaggerated ingroup favoritism, or happy individuals could show weakened ingroup favoritism. In other words, emotional states of happiness or sadness may influence actions in intergroup contexts. Thus, we can reasonably expect that emotional state and group status could have an interaction effect in other domains such as cooperation and competition in social dilemmas (Messick & Brewer, 1983; Van de Vliert, 1999) and intergroup trust (Hewstone, Cairns, Kenworthy et al., 2008; Tam, Hewstone, Kenworthy & Cairns, 2009).

In practical terms, the present research findings suggest that happiness states and group status could significantly influence willingness to forgive. Understanding this pattern could provide a psychological perspective to analyze and intervene in ethnic conflicts such as those
in Afghanistan, Iraq, and Israel, beyond sole political perspectives.

**Limitations and future directions**

Our two studies have limitations to be noted. First, both studies lack consideration about forgiveness toward ingroup perpetrators, that is, in both studies, perpetrators were outgroup members in relation to participants. Instead, we focused only on whether the victims were ingroup or outgroup members, and then investigated the influence of group status on forgiving. Previous studies have shown that individuals typically react more negatively to unambiguously negative ingroup members, such as murderers or rapists, than they react to despicable outgroup members – a phenomenon called black sheep effect (e.g., Marques, Robalo & Rocha, 1992; Marques & Yzerbyt, 1988; Marques, Yzerbyt & Leyens, 1988). Future investigation should consider the group membership of perpetrators and victims to examine whether happiness exaggerates or attenuates effects.

Second, in both studies, we measured the participants’ forgiving toward the perpetrator rather than their forgiveness trait. Trait of forgiveness could be an important individual difference reflecting to what extent individual would like to forgive the offender in general. Actually, another study we are now conducting is trying to investigate how such individual differences affect the relationship between happiness and behavior of forgiving.

Last but not least, as one reviewer pointed out, the relationship between local Hong Kong people and the Filipinos could be a potential confounding factor for our findings. That is, if there were conflicts between them (just like the Palestinians and the Israelis), there would be a strong preference of ingroup love and outgroup hate, which could contaminate the happiness effects on forgiveness. However, the fact is, at least before the tragedy, there is no strong sense
of outgroup hate between local Hong Kong people and the Filipinos, instead, there is a sort of mutual dependence between them. For example, Hong Kong families prefer to hire Filipinos as servants. Therefore, it would not be a critical challenge for the current findings. However, group relationship could still be an important issue for studying forgiveness among different groups, as it could provide a baseline for cross-group comparison.

CONCLUSION

In the two studies we report here, we address the relationship between happiness and forgiveness with regard to group status. We hypothesize a mood effect on forgiveness predicting that happy individuals tend to be more forgiving than sad individuals. More specifically, when happy or sad individuals see that an outgroup member is victimized, both show similar forgiveness levels. When the victim is an ingroup member, happy individuals show more forgiveness than do sad individuals. Although the findings are interesting, we caution that the studies are preliminary explorations assuming that happiness attenuates ingroup favoritism while sadness exaggerates it.
Acknowledgement

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NOTES

1 Given contemporary university students in Hong Kong are educated in English, and the official language in Hong Kong is English as well, all the materials in Studies 1 and 2 are presented in English.

2 Simple slopes analysis was conducted to examine the interaction effect between happiness and group status on forgiveness. Following the suggestion of Aiken and West (1991), for group status, we chose to use one SD below and above to plot the points. Given the dummy variable group status was centered already, and the SD = 1, therefore, it appears 1 and 1 to represent ingroup victims and outgroup victims, respectively (for more information, please see Bauer & Curran, 2005; Cohen, Cohen, West & Aiken, 2003; Preacher, Curran & Bauer, 2006; or readers can simply browse the website http://quantpsy.org/interact/mlr2.htm for a brief introduction).
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