

Empathy or Counter-Empathy? The Victims' Empathic Response Toward Offenders Depends on Their Relationships and Transgression Severity

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Introduction: Empathy facilitates prosocial behaviors, whereas counter-empathy harms others. The question that remains unanswered is: when and for whom do people show different empathic responses? This study aimed to explore the effects of transgression severity and interpersonal relationships on victims' empathy or counter-empathy toward an offender.

Methods: Before and after experiencing a slight or serious transgression, 42 college students were asked to imagine that they had different relationships (ie, intimate, strange, or bad) with a person and then report their empathy or counter-empathy toward that person from cognitive and affective aspects.

Results: The results showed that, in the affective aspect, the participants' empathy for the intimate friend decreased after a slight transgression and even disappeared after a serious transgression. For strangers, empathy transformed into counter-empathy after the transgression, and its intensity increased with the transgression's severity. For a person in a bad relationship, the participants felt counter-empathy before the transgression, and its intensity increased with the transgression's severity. In the cognitive aspect, participants' counter-empathy toward the stranger and the person in a bad relationship increased with transgression severity.

Discussion: These results suggest that interpersonal relationships and transgression severity can change the type and degree of a victim's empathy toward the offender. Our findings not only deepen our understanding of the cognitive aspect of counter-empathy but also provide insights for handling interpersonal conflict.

Keywords: counter-empathy, empathy, interpersonal relationship, transgression severity

Introduction

Empathy can promote prosocial behaviors,¹ while counter-empathy may engage in behaviors that harm others.² Empathy has been defined as the response a person cognitively and/or affectively feels toward another person in the absence of actually experiencing the other's situation.³ In the cognitive aspect, the person infers another person's mental state.⁴ In the affective aspect, the person shares another person's emotions. However, there are some situations in which one's emotional response to others is discordant with others' emotional experience: we term this difference the counter-empathy.⁵ That is, people experience pleasure in response to others' pain and displeasure in response to their pleasure.⁶

It is obvious that the definition of counter-empathy includes only its affective aspect; little research has been done on its cognitive aspect. It is necessary to know how people understand others' emotions when counter-empathy occurs. Specifically, would people wrongly infer (eg, infer others' happiness as sadness), not infer (eg, no longer try to understand others' emotions), or still accurately infer others' emotional states (eg, understanding the valence and intensity of others' emotions accurately, like the cognitive aspect of empathy)? We aimed to investigate the cognitive aspects of counter-empathy, which can facilitate a better and deeper understanding of counter-empathy. This can not only further develop the relevant theories of counter-empathy but also provide insight for the clinical and counseling fields on how to use cognitive approaches to intervene in counter-empathy.

Previous studies have shown that some special interpersonal (eg, competitors) and group relationships (eg, in-group and out-group members) can cause counter-empathy.^{5,7} A cooperative setting enhanced one's initial empathic responses to their partners' wins/losses, whereas a competitive setting led to counter-empathic responses toward their opponents.⁵ Additionally, people often feel less empathy or even more counter-empathy for strangers who belong to a different racial or social group, compared to strangers who are described as belonging to the same group.⁸ However, counter-empathy may exist in general social interactions rather than in a special context. Interpersonal relationship closeness, which is common in daily life, is sufficient to affect the type and degree of empathy. Our study allows us to understand the contextual moderators that impact when and for whom people decide to feel empathy or counter-empathy.

As a social species, we are surrounded by and connected to others. Greater empathy is usually purported to relate to more positive interpersonal interactions.⁹ A close relationship promotes the person's empathy for the other.¹⁰ A person's empathic neural responses to strangers are weaker than those to their friends.¹¹ However, fewer studies have examined one's empathy for those who have bad relationships with them. One possible reason for this is that people are more likely to have counter-empathy than empathy for them. Previous research has found that participants extracted a bit of joy from their disliked person's misfortune.¹² However, Greenier's study was conducted by assigning annoying personalities (eg, arrogance, rudeness, and dishonesty) to a stranger and then asking participants to report their feelings about the stranger's fortune or misfortune from a bystander's perspective. In contrast, our study examined how people's empathy for others changes when they personally experience others' annoying behaviors (eg, transgressions), especially when they have stable interpersonal relationships with others. Thus, the study first aimed to investigate the effects of interpersonal relationships on counter-empathy.

Interpersonal conflict is an inevitable and universal phenomenon in social interactions. It is possible that one feels happy about the offender's embarrassment rather than sympathizing with them. That said, the victim may exhibit counter-empathy rather than empathy toward the offender. When the victim is seriously hurt, they may alienate or retaliate against the offender.¹³ Compared to minor transgressions, severe transgressions may result in the victim developing stronger counter-empathy. However, direct evidence of this is lacking. Thus, the second aim was to investigate the effect of daily interpersonal transgressions of varying severity on counter-empathy.

Previous studies have found that interpersonal intimacy promotes empathy for others in the absence of a transgression,¹⁰ but few studies have considered how interpersonal relationships affect victims' empathy for or counter-empathy toward the offender. The stress-and-coping model of forgiveness¹⁴ highlights that one's negative cognitive, affective, and behavioral reactions to a transgression may be conceptualized as stress reactions.¹⁵ The victim's primary appraisal of a transgression may view the transgression as a threat (eg, "will this hurt me?") or a challenge (eg, "is this an opportunity for my relationship?"), followed by different stress reactions toward the offender in a subsequent secondary appraisal (eg, "what can I do?"). Specifically, if the transgression is perceived as a threat, the victim may show anger, retaliation, or withdrawal from the offender, but if it is perceived as a challenge, the victim's response may be empathic and conciliatory. Thus, people may evaluate the transgression from a friend as a challenge and the transgression from strangers or people with whom they have bad relationships as a threat, and then show different empathic responses toward them. The more satisfied and connected a relationship, the more likely it is that one will forgive a transgression by that partner.¹⁶ It is noted that in order to avoid differences in forgiveness due to the level of relationship closeness,¹⁷ the intimate relationship in our study was limited to a "friend" relationship. In addition, forgiveness can promote empathy for the offender.¹⁶ Thus, we speculate that people may have more empathy for their friends than for other offenders. However, it is unlikely that one retains the same empathy for friends before and after a transgression. Meanwhile, driven by a desire for revenge,¹⁸ originally weak empathic responses toward a stranger before the transgression are likely to disappear or even become counter-empathic responses after the transgression. Additionally, interpersonal offenses may worsen precarious relationships; therefore, people's counter-empathy toward offenders in bad relationships may increase dramatically.

Overall, this study aimed to comprehensively explore the effect of interpersonal relationships and transgression severity on victims' empathy or counter-empathy from both cognitive and affective aspects. If we can understand the changes in the victim's empathy for the offender under different interpersonal relationships, the psychological workers can make targeted interventions (eg, the victim is trained to increase his empathy for the intimate offender but decrease his counter-empathy for the disliked offender) on the negative emotional reactions caused by interpersonal transgression. We hypothesized that interpersonal relationships and transgression severity would change the type and intensity of victims' empathy. We speculated

that when a transgression occurs (compared to the no-transgression condition) and its severity increases, the victim's empathy for an intimate friend would decrease (ie, the friend's positive experience induced more pleasure than his negative experience, and this difference decreased). For a stranger, empathy would change into counter-empathy (ie, the stranger's positive experience induced more pleasure than his negative experience with no transgression, whereas the stranger's negative experience induced more pleasure than his positive experience after a transgression, and this difference increased with transgression severity). For a person in a bad relationship, inherent counter-empathy would increase (ie, the person's negative experience would induce more pleasure than his positive experience, and this difference would increase). Additionally, we explored how the cognitive aspect of counter-empathy changes when it occurs and increases.

Methods

Participants

The study used a 3 (transgression severity: no, slight, serious) \times 3 (relationship: intimate, strange, bad) \times 2 (event valence: negative, positive) within-subject design. Combined with the *F*-value ($F = 20.43$) and sample size ($N = 48$) of a previous study,⁶ the sample size of this study was determined using an open-source R package, BUCSS.¹⁹ Assuming $\alpha = 0.05$, the power analysis indicated that 21 participants would be needed to reach a power of at least 0.95. A total of 42 college students (24 female, mean age = 24.00 ± 1.988 (*SD*) years), with no history of neurological or psychiatric disorders, were recruited in this study. All the participants provided written informed consent and were paid for their participation. This study was approved by the Ethics Committee of the Department of Psychology at Shanghai Normal University and conducted in accordance with the Declaration of Helsinki.

Materials

Scenario and Events Creation

Offensive scenarios and emotional events were created by an additional questionnaire survey of a separate sample of college students ($N = 102$, 74 females, mean age = 23.07 ± 3.223 (*SD*) years). These college students were asked to report their past offensive experiences, as well as five pairs of emotional events that made them feel pleasant or unpleasant. We screened 50 offensive scenarios which could happen with the students and 20 pairs of common emotional events. A pilot study with another separate sample of participants ($N = 33$, 22 females, mean age = 25.94 ± 2.968 (*SD*) years) rated these scenarios and events to confirm that they were perceived as serious and slight, negative, and positive, respectively. A 7-point scale ranging from 1 (not at all) to 7 (extremely offensive) was used to rate the severity of the offensive scenarios. All scenarios were in ascending order based on their severity ratings, and we selected 15 scenarios at the beginning as slightly offensive scenarios (eg, [The protagonist] deliberately does not reply to my message), and the 15 scenarios at the end as seriously offensive scenarios (eg, [The protagonist] does nothing to break my favorite thing) in the main study. A paired-sample *t*-test was conducted to compare the severity ratings of the two types of scenarios, which indicated that the severity ratings of the serious scenarios ($M = 5.964$, $SD = 0.886$) were higher than those of the slight scenarios ($M = 5.123$, $SD = 0.890$), $t(32) = 6.809$, $p < 0.001$, $d = 1.185$. Emotional event valence was rated on a 7-point scale ranging from 1 (extremely negative) to 7 (extremely positive). All pairs of events were presented in descending order based on the difference in scores between negative and positive events, and we selected the first 15 pairs of events as the experimental materials in the main study. Negative and positive events were matched. For example, if the negative event was that "[the protagonist] failed in the final exam", the matching positive event was that "[the protagonist] did well in the final exam." A paired-sample *t*-test was conducted to compare the ratings of the two types of events, which indicated that negative events ($M = 2.457$, $SD = 1.176$) were rated more negatively than positive events ($M = 5.994$, $SD = 0.793$), $t(32) = 12.131$, $p < 0.001$, $d = 2.112$. In the main study, we used a combination of offensive scenarios and emotional event pairs.

Measurement of Empathy or Counter-Empathy

We used a 7-point bipolar scale, 5 ranging from 1 (extremely negative) to 7 (extremely positive), to measure empathy or counter-empathy. An emotional experience that is congruent with the valence of another's emotion is considered empathy, whereas an incongruent experience represents counter-empathy. When other persons have negative emotions, the score for the

other persons' feelings about them is significantly lower than the median, level 4 of 7 (ie, the other persons have negative emotions), indicating that persons have empathy. If the score is significantly higher than 4 (ie, the persons have positive emotions), the person has counter-empathy. When the person has no empathy, the score should not differ significantly from 4.

Procedure

First, the experiment was advertised as a reading comprehension test. Participants were asked to think of a fellow student whom they considered a good friend (ie, an intimate relationship), whom they did not know (ie, a strange relationship), or whom they disliked and had interpersonal problems with (ie, bad relationships).

Second, the participants imagined the scenario protagonist as the fellow student, according to the interpersonal relationships required in the instructions. We then measured the participants' empathic or counter-empathic responses with the protagonist in the absence of a transgression. Participants answered two event-related questions regarding the negative and positive events that occurred to the protagonist. The event-related questions were used separately to measure the participants' cognitive and affective empathy/counter-empathy, including "how do you think this makes him/her feel?" and "how does this make you feel?" They were rated on a 7-point scale ranging from 1 (extremely negative) to 7 (extremely positive) (see Figure 1a). After the participants rated all the questions in one relationship, they were randomly asked to imagine the scenario protagonist as a fellow student in another instructed relationship and again report their feelings toward the protagonist.

Finally, the participants were required to imagine themselves in offensive scenarios with the protagonist in the three relationships. After a slight or serious scenario, the participants were asked to answer two scenario-related questions to measure their immersion and perceived transgression separately. The questions were rated on a 7-point scale ranging from 1 (not at all) to 7 (extremely), including "to what extent are you immersed in this scenario?" and "to what extent do you feel offended by him/her?" Then, the participants were told that the protagonist had experienced some emotional events after offending them and were asked to answer two event-related questions to measure their empathy type and intensity (see Figure 1b). We combined the three relationships for all the scenarios and events. Under every relationship condition, participants were immersed in all 30 offensive scenarios and responded to all 15 pairs of emotional events.

Results

Manipulation Checks

Previous studies have shown that stronger immersion leads to more intense emotions.²⁰ We did not want the participants' immersion differences in the two types of offensive scenarios to affect our results. Thus, we wanted the participants to demonstrate the same level of immersion in both types of offensive scenarios. In addition, we hoped that participants would feel more offended by seriously offensive scenarios than by slightly offensive scenarios. This proved that our manipulation of transgression severity was successful. A paired-sample *t*-test indicated no significant difference in immersion between the seriously ($M = 6.219$, $SD = 0.842$) and slightly ($M = 6.210$, $SD = 0.803$) offensive scenarios, $t(41) = 0.347$, $p = 0.730$, $d = 0.054$. A paired-sample *t*-test indicated that the severity ratings of serious scenarios ($M = 6.068$, $SD = 0.610$) were higher

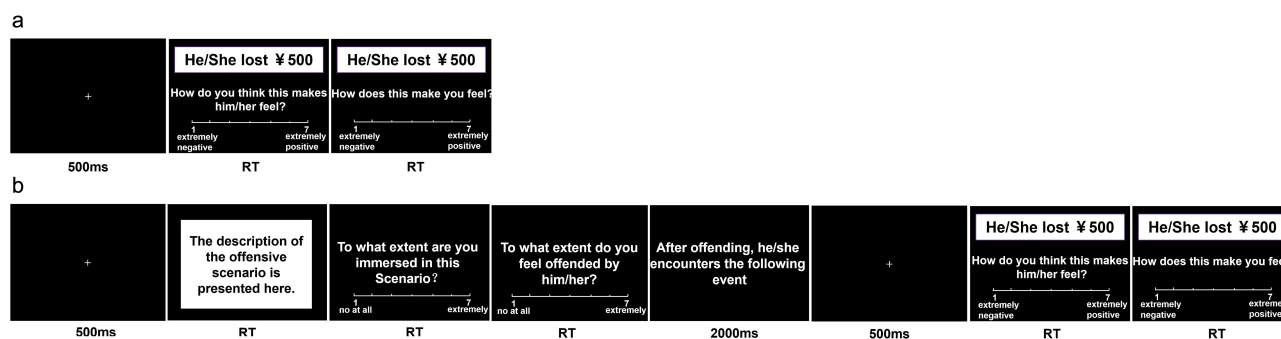


Figure 1 The sequences of events in the study.

Notes: (a) Sequence of events during a single trial in the absence of transgression (b) Sequence of events during a single trial after a transgression.

than those of slight scenarios ($M = 5.484$, $SD = 0.702$), $t(41) = 10.441$, $p < 0.001$, $d = 1.611$. The results showed that the setting of scenarios in this experiment was successful.

Affective Aspect

Changes in the Type of Empathy

The question — “how does this make you feel?” was used to measure participants’ affective aspects of empathy/counter-empathy. A 3 (transgression severity: no, slight, serious) \times 3 (relationship: intimate, strange, bad) \times 2 (event valence: negative, positive) within-subjects ANOVA revealed the main effects of transgression severity ($F(2, 82) = 12.932$, $p < 0.001$, $\eta_p^2 = 0.240$) and relationship ($F(2, 82) = 6.439$, $p = 0.008$, $\eta_p^2 = 0.136$). All two-way interactions were significant ($F_{\text{transgression severity} \times \text{relationship}}(4, 164) = 8.956$, $p < 0.001$, $\eta_p^2 = 0.179$; $F_{\text{transgression severity} \times \text{event valence}}(2, 82) = 148.794$, $p < 0.001$, $\eta_p^2 = 0.784$; $F_{\text{relationship} \times \text{event valence}}(2, 82) = 174.614$, $p < 0.001$, $\eta_p^2 = 0.810$). The three-way interaction effect was significant, $F(4, 164) = 13.497$, $p < 0.001$, $\eta_p^2 = 0.248$. Multiple comparisons were conducted using the Bonferroni method. Under the no transgression condition, the participants showed empathy for the intimate friends. Specifically, they felt more pleasant toward the friends’ positive ($M = 5.743$, $SD = 0.547$) than negative experience ($M = 2.344$, $SD = 0.572$), $F(1, 41) = 424.912$, $p < 0.001$, $\eta_p^2 = 0.912$). Under the slight transgression condition, the participants showed empathy for their intimate friends. Specifically, they felt more pleasant toward the friends’ positive ($M = 4.546$, $SD = 0.794$) than negative experience ($M = 3.406$, $SD = 0.823$), $F(1, 41) = 21.471$, $p < 0.001$, $\eta_p^2 = 0.344$). Under the serious transgression condition, the participants showed no empathy for their friends. Specifically, pleasantness toward the friends’ positive ($M = 4.252$, $SD = 0.959$) and negative experiences ($M = 3.913$, $SD = 1.040$) has no significant difference, $F(1, 41) = 1.260$, $p = 0.268$, $\eta_p^2 = 0.030$. Under the no transgression condition, participants showed empathy for strangers. Specifically, they felt more pleasant toward strangers’ positive ($M = 4.625$, $SD = 0.546$) than negative experiences ($M = 3.311$, $SD = 0.487$), $F(1, 41) = 73.440$, $p < 0.001$, $\eta_p^2 = 0.642$). Under the slight transgression condition, the participants showed counter-empathy toward strangers. Specifically, they felt more unpleasant toward strangers’ positive ($M = 3.611$, $SD = 0.697$) than negative experiences ($M = 4.743$, $SD = 0.753$), $F(1, 41) = 28.598$, $p < 0.001$, $\eta_p^2 = 0.411$). Under the serious transgression condition, participants showed counter-empathy toward strangers. Specifically, they felt more unpleasant toward strangers’ positive ($M = 3.367$, $SD = 0.788$) than negative experiences ($M = 5.129$, $SD = 0.822$), $F(1, 41) = 57.029$, $p < 0.001$, $\eta_p^2 = 0.582$). Under the no-transgression condition, the participants showed counter-empathy for persons in bad relationships. Specifically, they felt more unpleasant toward the persons’ positive ($M = 3.752$, $SD = 0.527$) than negative experiences ($M = 4.357$, $SD = 0.573$), $F(1, 41) = 16.155$, $p < 0.001$, $\eta_p^2 = 0.283$). Under the slight transgression condition, the participants showed counter-empathy toward other persons. Specifically, they felt more unpleasant toward the persons’ positive ($M = 3.029$, $SD = 0.925$) than negative experiences ($M = 5.206$, $SD = 0.975$), $F(1, 41) = 59.485$, $p < 0.001$, $\eta_p^2 = 0.592$). Under the serious transgression condition, the participants showed counter-empathy toward other persons. Specifically, they felt more unpleasant toward the persons’ positive ($M = 2.959$, $SD = 0.948$) than negative experiences ($M = 5.413$, $SD = 0.973$), $F(1, 41) = 76.855$, $p < 0.001$, $\eta_p^2 = 0.652$. Table 1 shows the results.

Changes in the Degree of Empathy/Counter-Empathy

We further analyzed the three-way interaction effect (see Figure 2a). In all three relationships, participants reported that they felt best when negative events happened to offenders after a serious transgression, followed by after a slight

Table 1 The Effect of Transgression Severity on the Victim’s Empathy Type in Different Interpersonal Relationships

	No Transgression	Slight Transgression	Serious Transgression
Intimate	Empathy	Empathy	No empathy
Strange	Empathy	Counter-empathy	Counter-empathy
Bad	Counter-empathy	Counter-empathy	Counter-empathy

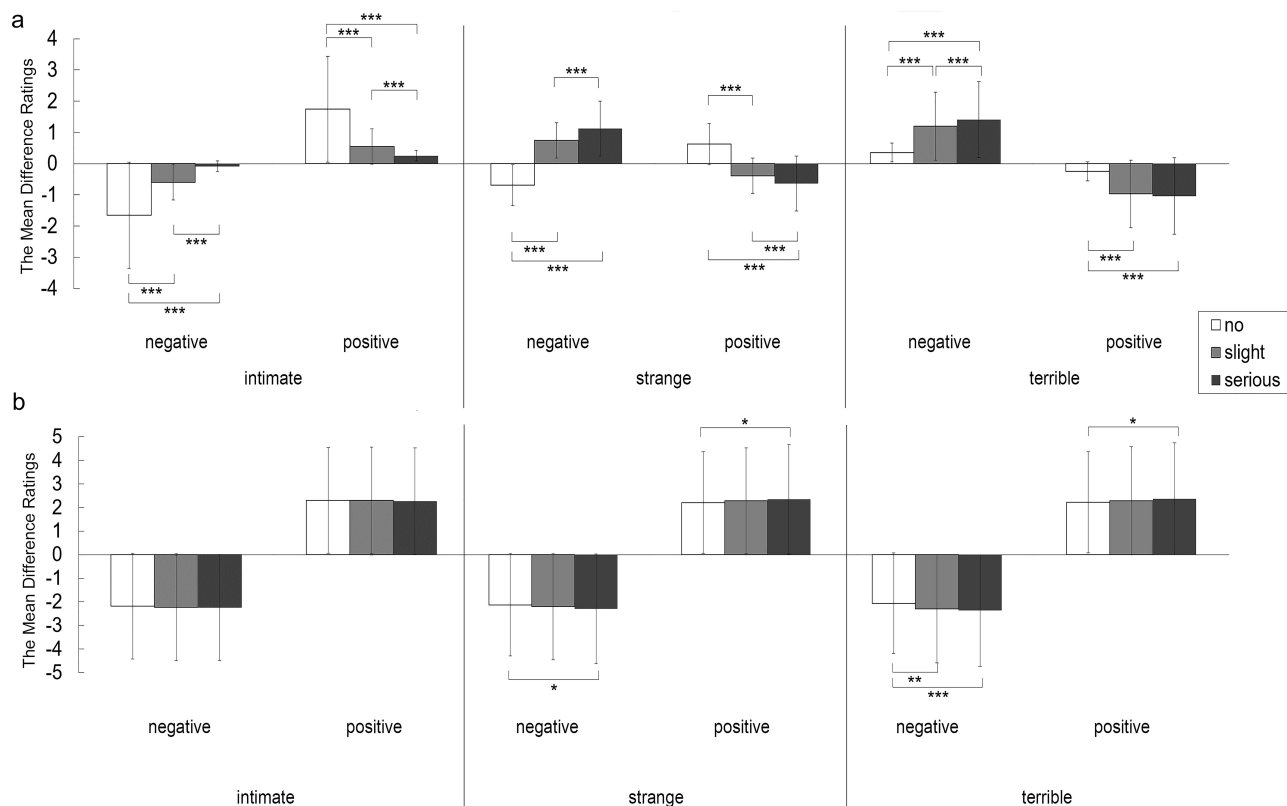


Figure 2 Results from the interaction effect of the affective and cognitive aspect of empathy/ counter-empathy.

Notes: To visually present the emotional valence, we show the mean difference ratings (ratings = 4) for each condition. Negative values indicate negative emotions, and positive values indicate positive emotions. (a) Interaction effect of the affective aspects of empathy or counter-empathy. (b) Interaction effect of the cognitive aspects of empathy or counter-empathy. * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Error bars represent SEM.

transgression, and finally no transgression ($F_{\text{intimate}} (2, 40) = 46.006, p < 0.001, \eta_p^2 = 0.697$; $F_{\text{strange}} (2, 40) = 93.619, p < 0.001, \eta_p^2 = 0.824$; $F_{\text{bad}} (2, 40) = 40.522, p < 0.001, \eta_p^2 = 0.670$). For intimate friends and strangers, the participants reported that they felt worst when positive events happened to them after a serious transgression, followed by after a slight transgression, and finally no transgression ($F_{\text{intimate}} (2, 40) = 61.123, p < 0.001, \eta_p^2 = 0.753$; $F_{\text{strange}} (2, 40) = 43.055, p < 0.001, \eta_p^2 = 0.683$). For persons in bad relationships, the participants reported that they felt worse when positive events happened to other persons after serious and slight transgression than no transgression, $F (2, 40) = 26.539, p < 0.001, \eta_p^2 = 0.570$.

Cognitive Aspect

Changes in the Degree of Empathy/Counter-Empathy

The question “how do you think this makes him/her feel?” was used to measure the participants’ cognitive aspects of empathy/counter-empathy. A three-way within-subjects ANOVA revealed the main effects of transgression severity ($F (2, 82) = 5.566, p = 0.010, \eta_p^2 = 0.120$) and event valence ($F (1, 41) = 773.997, p < 0.001, \eta_p^2 = 0.950$). The interaction effect of transgression severity and event valence was significant, $F (2, 82) = 7.277, p = 0.006, \eta_p^2 = 0.151$. The three-way interaction was significant, $F (4, 164) = 4.471, p = 0.004, \eta_p^2 = 0.098$ (see Figure 2b). Multiple comparisons were conducted using the Bonferroni method. For strangers, the participants thought that strangers felt worse when meeting negative events after serious transgression ($M = 1.716, SD = 0.589$) than no transgression ($M = 1.888, SD = 0.518; p = 0.031$), $F (2, 40) = 3.899, p = 0.028, \eta_p^2 = 0.163$. For persons in bad relationships, the participants thought that persons felt worse when meeting negative events after serious transgression ($M = 1.648, SD = 0.557; p < 0.001$) and slight transgression ($M = 1.722, SD = 0.587; p = 0.006$) than no transgression ($M = 1.955, SD = 0.540$), $F (2, 40) = 10.938, p < 0.001, \eta_p^2 = 0.354$. Additionally, for strangers, the participants thought that strangers felt better when meeting positive

events after serious transgression ($M = 6.337$, $SD = 0.536$) than no transgression ($M = 6.191$, $SD = 0.553$; $p = 0.025$), $F(2, 40) = 5.334$, $p = 0.009$, $\eta_p^2 = 0.211$. For persons in bad relationships, the participants thought that persons felt better when meeting positive events after serious transgression ($M = 6.356$, $SD = 0.550$) than no transgression ($M = 6.200$, $SD = 0.500$; $p = 0.019$), $F(2, 40) = 5.839$, $p = 0.006$, $\eta_p^2 = 0.226$. No other pairwise comparisons were significant ($ps > 0.05$). The main and interaction effects of other variables were not significant ($ps > 0.05$).

Discussion

Interpersonal conflict occurs everywhere in daily life. The negative effects of interpersonal transgression will not only hinder the maintenance and repair of interpersonal relationships but also damage emotional connections among people and even threaten social harmony. This study provides direct evidence that interpersonal relationships and transgression severity can affect the type and degree of victims' empathy toward offenders.

Regarding the affective aspect, our results showed that for intimate friends, people tended to experience empathic responses before the transgression, but these responses were reduced after a slight transgression and even disappeared when the transgression was serious. People showed empathy for strangers before the transgression, but empathy transformed into counter-empathy after the transgression. The intensity of counter-empathy increased with the severity of the transgression. For persons in bad relationships, people had counter-empathy before the transgression, and the intensity of counter-empathy also increased with the transgression's severity. These findings can be explained by the appraisal theory, which states that people's specific emotions are not only induced by the events they encounter but are also produced through their cognitive appraisals of these events.²¹ Victims have different evaluations not only of transgressions of different severities but also of the same transgression with different offenders. For instance, people may perceive their friends' offenses as less serious, even when their friends and strangers offend them equally. Furthermore, Feather²² proposed that people who believe that one's negative outcomes are deserved would experience delight when the one gets unfortunate deserts. Thus, they think persons in bad relationships with them deserve punishment and they feel happy about it. When good things happen to people, they feel bad and complain about the injustice of their fate. Counter-empathy easily occurs when people are prejudiced against others.²³ Due to the lack of familiarity with strangers and a bad impression of persons who had bad relationships with them; after a transgression, people tend to be prejudiced against them and perceive them as "bad men." Thus, people tend to show increased counter-empathy for the "bad guys" after the transgression. However, after the transgression, they only feel decreased empathy for "good men" (ie, their friends) whose misfortunes are not deserved, rather than counter-empathy.

In the cognitive aspect, for intimate friends, there were no significant differences in participants' empathy before and after the transgression. This phenomenon means that people were still able to understand the pleasure and pain of their friends but avoided empathizing with them emotionally. This provides direction for the intervention of forgiveness. If counselors want victims to invite their friends, they should emphasize the emotional rather than the cognitive aspect of empathy. Our results showed that for strangers and persons in bad relationships, transgression severity enhanced participants' counter-empathy in the cognitive aspect. The psychological perspective of the self suggests that people are motivated to feel good about themselves.²⁴ Therefore, the perception that the offender is in a worse emotional state can help the victim feel happy, which is a potential road to positive feelings. In addition, transgression leads to a stronger perception of the offender as fortunate, which can induce pain. A previous study found that counter-empathy requires more cognitive processing than empathy.²³ It means that people may suffer more cognitive stress after being offended by strangers or persons with whom they had bad relationships, compared to being offended by intimate friends. This should be taken seriously by psychological workers in the clinical and counseling fields.

Our findings showed that, when counter-empathy occurs, people can still accurately recognize and understand others' emotions. Additionally, the present study provides a better understanding of the synchronous cognitive and affective components of counter-empathy. When counter-empathy occurs, the stronger one thinks another person's emotional experience is, the stronger one's opposing emotions are. This is similar to the pattern of empathy, in that the more one understands others, the easier it is to share their emotions. This study also provides insights for future intervention research. Cognitive empathy has been found to promote affective empathy; that is, people's recognition and understanding of others' emotions encourage them to share others' emotions.²⁵ This implies that we can also reduce people's affective counter-empathy by weakening or altering their understanding of others' emotions from a cognitive perspective.

In summary, our study supports the idea that counter-empathy occurs in general interpersonal interactions. Interpersonal offenses are most likely to occur between strangers. Our findings show that people might be more prone to feel counter-empathy toward offenders without close relationships. A strange relationship is likely to make the victim feel free to hurt the offender, driven by counter-empathy, which needs to attract the attention of psychological workers. Our findings demonstrate that people experience different types of empathy toward different offenders. This will help provide valuable direction for forgiveness interventions. For intimate offenders, forgiveness interventions should focus on enhancing the victim's empathy toward the offender. However, for a stranger and an offender, who has a bad relationship with the victim, the key to promoting forgiveness is to reduce the victim's counter-empathy rather than blindly emphasizing the enhancement of their empathy.

However, the present study has a few limitations that merit further discussion. We selected college students as subjects, and the offending materials in the experiment were limited to events on campus. Future research should extend this study by examining whether the same effects occur in people of all ages and strata. Additionally, future research could benefit from supplementing measures of participants' forgiveness and empathy for actual behavior and physiological reactions. Lastly, the participants in our study were forced to imagine the scenarios taking place by the use of text alone. Future work could potentially consider depicting actual scenarios (eg, videos) or circumstances to improve the context and standardization of scenario interpretations.

Conclusion

This study examined the effects of transgression severity on victims' empathy and counter-empathy in different interpersonal relationships. We found that when a transgression occurred and its severity increased, the victim's empathy for an intimate friend decreased, and even disappeared when the transgression was serious. Their empathy for strangers changed into counter-empathy, and the degree of counter-empathy increased with the transgression's severity. Their counter-empathy toward a person in a bad relationship increases with the transgression's severity. Additionally, we found that when counter-empathy occurs, people could still accurately recognize and understand others' emotions. The stronger one thinks of another person's emotional experience, the stronger one's opposite emotions. Our findings need to be taken seriously by psychological workers, because after a transgression, a lack of empathy may allow people to turn a blind eye toward their friends' suffering and even feel pleasure in response to the pain of strangers and persons in bad relationships, which may motivate people to engage in further harmful behaviors. Additionally, a better understanding of the cognitive aspects of counter-empathy may help to develop more effective interventions targeting counter-empathy.

Data Sharing Statement

The datasets generated during and/or analyzed during the current study are available in the HARVARD Dataverse repository, <https://doi.org/10.7910/DVN/4EG0SZ>.

Ethics Approval and Informed Consent

This study was approved by the Academic Ethics and Ethics Committee of Shanghai Normal University and conducted in accordance with the 1964 Declaration of Helsinki. All participants provided written informed consent.

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Disclosure

The authors declare that they have no conflicts of interest to disclose.

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