Received: 31 January 2022 | Accepted: 8 August 2022

DOI: 10.1111/bjop.12593

ORIGINAL ARTICLE

Permitting immoral behaviour: A generalized compensation belief hypothesis

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Funding information

John Templeton Foundation, Grant/Award Numbers: 60958, 60734

Abstract

When are we more likely to permit immoral behaviours? The current research examined a generalized compensation belief hypothesis that individuals, as observers, would morally tolerate and accept someone paying forward unfair treatment to an innocent person as a means to compensate for the perpetrator's previously experienced mistreatment. Across five experiments (N = 1107) based on economic games (Studies 1–4) and diverse real-life scenarios (Study 5), we showed that participants, as observing third parties, were more likely to morally permit and engage in the same negative act once they knew about previous maltreatment of the perpetrator. This belief occurred even when the content of received and paid-forward maltreatment was non-identical (Study 2), when the negative treatment was received from a non-human target (Study 3) and when the maltreatment was intangible (e.g. material loss) or relational (e.g. social exclusion; Study 5). Perceived required compensation mediated the effect of previous maltreatment on moral permission (Studies 4 and 5). The results consistently suggest that people's moral permission of immoral behaviours is influenced by perpetrator's previous mistreatment, contributing to a better understanding of the nature and nuances of our sense of fairness and contextualized moral judgement.

KEYWORDS

generalized compensation belief, moral permission, pay-it-forward, previous maltreatment, unethical behaviour

Practitioner Points

- Our findings could have implications for social movements such that observers may permit protestors to hurt innocent others to accuse certain targets (e.g., government policy).
- Observers may permit a cycle of unfair, unjust, and immoral actions unless these individuals realize better alternatives exist to compensate for the wrongs of the past.
- Observers may permit a cycle of unfair, unjust, and immoral actions unless organizations or societies can rectify prior injustices through systemic changes.

BACKGROUND

Despite that human societies have made a lot of progress throughout history (Pinker, 2018), it is still not uncommon for people to observe various forms of maltreatment and transgressions in daily life (e.g. financially, verbally or even physically harming others). Interestingly, people often use prior suffering or miserable experiences of the perpetrator (e.g. being socially excluded at school) to explain or even justify misconduct. As Nietzsche commented, 'One must repay good and ill; but why just to the person who did us good or ill?' The interesting question is: do most people share this view and perceive it as morally permissible to some extent to harm an innocent person, if the perpetrator has suffered from past maltreatment?

These judgements could significantly affect social behaviour, given the inherently social nature of morality (Haidt, 2007). Theoretically, moral judgement should be completely based on the nature and severity of the act itself. However, would the prior suffering of the protagonist make a difference? Despite its theoretical and practical significance, most moral psychology research has mostly focused on decontextualized moral judgement (e.g. Schein, 2020). It is relatively unknown whether and how people would morally judge the maltreatment of others based on past negative treatment experienced by the perpetrators.

To shed light on this question, we proposed and tested a new hypothesis—the generalized compensation belief hypothesis—that people hold a generalized belief that permits and tolerates paying-forward unfair treatment to an innocent person as compensation for one's past sufferings. People might have this type of belief both when they are third-party observers and perpetrators of immoral behaviours. However, the existence of this belief could be most clearly tested in third-party situations when one's moral judgement is less driven by self-interest. In the current research, we aim to systematically examine the existence and underlying mechanism of this generalized compensation belief.

The generalized belief compensation hypothesis

People have a general tendency to reciprocate (Gouldner, 1960; Homans, 1961). They not only pay kindness back to the initial favour giver, but also pay it forward to a completely new target (e.g. Chang et al., 1912; Hamilton & Taborsky, 2005; Pfeiffer et al., 2005; Stanca, 2009), and its obverse negative pattern also exists. After receiving maltreatment, individuals tend to retaliate against the target who exerted the initial act (if A hurts B, then B hurts A; Chernyak et al., 2019; for a review, see Jackson et al., 2019). More interestingly, people also have a general tendency to pay forward one's maltreatment to an innocent target (if A hurts B, then B hurts C), a phenomenon known as *generalized negative reciprocity* (Gray et al., 2014; Leimgruber et al., 2014; Zhu et al., 2021). For example, participants who previously received unfair treatment were more likely to act unfairly when they were given the chance to allocate resources (e.g. Gray

et al., 2014; Hu et al., 2018; Strang et al., 2016), and people feel entitled to behave selfishly to compensate past maltreatment received (Zitek et al., 2010).

The interesting question that remains unknown is: how do people morally view such generalized negative reciprocity—how would observers judge a perpetrator's unfair treatment of others after learning about the perpetrator's past sufferings? According to our general compensation belief hypothesis, individuals would consider perpetrators' prior experiences and would morally permit paying-forward unfair treatment to an innocent person. Broadly speaking, we contend that individuals judge negative behaviour as morally permissible when the perpetrator has been the victim of past unfair or unjust behaviour. That is, for an observer (from D's perspective), it could be acceptable (i.e. morally permissible) for B (current perpetrator) to mistreat C (an innocent target) if B had previously been treated unfairly or unjustly by A (prior perpetrator; see Figure 1). According to the generalized compensation belief held by the observer (D), the initial maltreatment experienced by the victim (B) would require some form of compensation, which would then lead to permission to pay forward maltreatment, even at the cost of hurting an innocent person (C). In other words, this paying forward could be considered a means of compensation for victim B (in the initial interaction) to make up for the loss or perceived suffering.

Findings in the literature make competing predictions for the existence of such a generalized compensation belief. For example, according to the *morality-is-cooperation* (MAC) theory, solutions to problems of cooperation constitute human morality (Curry, 2016, 2019a). In other words, whether an action is considered morally acceptable is determined by whether it promotes cooperation (Curry et al., 2019b). That is why 'conditional cooperation' or 'reciprocal altruism' (Axelrod, 1984; Trivers, 1971) is judged as morally acceptable since these actions promote cooperation by providing solutions to social dilemmas and can realize mutual benefits (Curry, 2016). According to this view, observers should not perceive paying forward a negative act to innocent victims as morally acceptable, given that such a chain does not promote cooperation (if not promote the opposite).

In addition, *system justification theory* argues that people have a need to defend and legitimize existing social and economic arrangements (Jost & Hunyady, 2002). To do so, they sometimes even blame the victims and rationalize theirs and others' sufferings (e.g. Jost et al., 2004). In this vein, observers may rationalize B's suffering during the interaction with A by victim-blaming B and may not necessarily empathize with B. Observers thus may not necessarily find the victims' previous suffering can be used as an excuse to engage in the paying-forward misconduct.

On the contrary, a generalized compensation belief hypothesis would be in line with the theories of 'person-specific equity' and 'equity with the world'. Traditional equity theory states that individuals attempt to maintain 'person-specific equity' (Gouldner, 1960; Homans, 1961), such that they are willing to pay kindness back to the initial favour giver (e.g. Hamilton & Taborsky, 2005; Stanca, 2009) and retaliate against those who treated them badly (Jackson et al., 2019). The equity with the world theory (Austin & Walster, 1974) further proposed that individuals also care about the amount of net equity they receive across relationships. It has been found that participants who previously received unfair treatment were more likely to act unfairly (and feel satisfied as a result) when they were given the chance to allocate resources, hurting a completely new target (e.g. Austin & Walster, 1975; Gray et al., 2014; Strang et al., 2016). Although person-specific equity and equity with the world show that people pay forward maltreatment as victims, it remains unclear how people morally judge these behaviours. In other words, do people actually believe such behaviours as morally permissible and tolerable, or are they simply more likely to pay forward maltreatment to seek self-interested compensation?

Indeed, empirical studies on generalized negative reciprocity (e.g. Gray et al., 2014; Hu et al., 2018; Sjöström & Gollwitzer, 2015) have demonstrated that participants' negative affect, such as anger and upset (e.g. Gray et al., 2014), or perceived entitativity (i.e. B's perception of A and C as an entitative group; e.g. Sjöström & Gollwitzer, 2015), was the driving force for them to pay forward maltreatment. Whether observers actually also hold a moral belief that permits perpetrators to pay forward past suffering to inno-

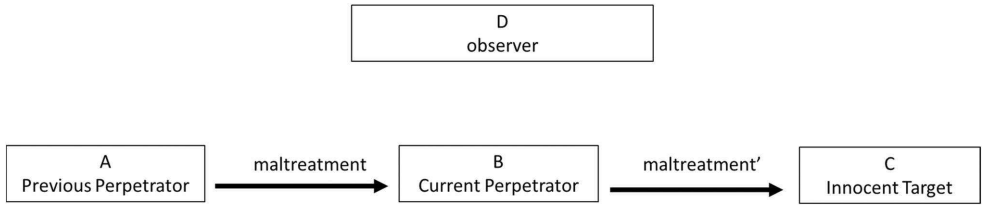

FIGURE 1 Parties involved in the generalized compensation belief hypothesis.

cent strangers is unclear. This is a crucial question of both theoretical and practical significance. People not only experience various forms of maltreatment or unfair treatment, but also observe maltreatment of others. In such cases, people's moral judgements can significantly shape the outcomes for the perpetrator, the victims and even the whole system, and their moral judgements can have important implications for third-party interventions.

It is possible that people may hold a generalized compensation belief because they not only care about the amount of net equity they receive within and across relationships, as the person-specific equity and equity with the world theories postulate, but also, as observers, they would also like to see net equity across relationships for other people. Therefore, we propose a generalized compensation belief held by observers (Ds). That is, the observers (Ds) can believe that in the initial maltreatment, the historical victim (B) has experienced would create a debt. Permission to pay forward the initial maltreatment, even at the cost of hurting an innocent person (C), can be considered as some form of compensation for B, cancelling the previous debt and thus achieving net equity for B. In other words, observers could consider paying-forward maltreatment as a means of compensation for victim B to make up for the initial loss or suffering.

It is worth pointing out that if a generalized compensation belief exists, it might be applied to a relatively broad range of situations and forms of treatment. To compensate for the loss, the content (or form) of maltreatment of two interaction rounds (i.e. A to B and B to C) can be identical or non-identical. That is, the compensation may take the same form as the initial unfair experience or assume a different form. More broadly, paying-forward maltreatment does not always have to be from one individual to another; maltreatment could also be received from or paid forward to non-human targets. In addition, whereas the phenomenon of generalized negative reciprocity in existing empirical studies is primarily demonstrated in behavioural economic situations (e.g. the Dictator Game), we posit that generalized compensation belief is likely to occur under various circumstances. The forms of maltreatment could be tangible and material, such as property loss and resource allocation (as demonstrated in the Dictator Game), but the mistreatment could also be relational and non-tangible, such as social exclusion and bullying. Finally, such a belief might guide people's responses to their unfair experiences (as the victim B) as well others' experiences (as the observer D). We seek to test these possibilities by adopting a diverse range of stimuli and situations.

Overview and hypotheses

The primary aim of the current research was to test whether a generalized compensation belief exists, and if so, whether required compensation is the underlying mechanism. Towards this end, we employed the Dictator Game paradigm to test whether participants, as third parties, would be more likely to morally permit unfair behaviours once they learn about the previous maltreatment received by the perpetrators across a variety of circumstances (Studies 1–4). Study 5 was conducted to conceptually replicate Studies 1–4 with more diverse life situations, as well as to examine whether similar effects could be obtained when participants were the first-party perpetrator. We tested required compensation as a potential mediator to account for this effect (Studies 4 and 5), controlling for and ruling out competing mechanisms (Study 4).

As an extension of the major findings, we also tested immoral behaviour among observers as one possible downstream consequence of this generalized compensation belief (see Appendix S1).[1]

For all studies, we have reported all measures and data exclusions. The research has received ethics approval from the corresponding author's institution (EA200118). Data for the current research can be accessed via https://osf.io/dpkr4/?view_only=9116043f35e44db5b7c72872d2943337. For sample size determination and additional experiment materials and supplemental results, please see Appendix S1.

STUDY 1

In Study 1, we tested the generalized compensation belief hypothesis in the Dictator Game paradigm. Specifically, participants observed a dictator distributing a given workload unfairly between themselves and a recipient in favour of the dictator. Half of the participants were informed that the current dictator was a recipient in the last game and was treated unfairly (i.e. *previous maltreatment* condition), whereas the other half of the participants were not provided with such information (i.e. *no maltreatment* condition). If people hold a generalized compensation belief, we should observe that participants who were informed by the dictator's previous maltreatment would be more likely to morally permit and less likely to punish this dictator's negative act than those who received no such information.

Method

Participants

Two hundred and three participants were recruited via Amazon's Mechanical Turk Prime (M = 38.5, SD = 11.9, 91 women, 69% European American, 18% African American, 13% others). Participants were randomly assigned to one of the two conditions (previous maltreatment or no maltreatment), resulting in approximately 100 participants in each condition. Participants received monetary compensation at the end of the study.

Procedure and measures

After reading the instructions and providing some general demographic information, participants were told to observe something that happened between two other people, make a few judgements about it and take action that they found appropriate. In particular, they told that Player A and Player B were two Mechanical Turk workers with eight tasks to complete to receive their participant payment. These tasks would not be easy, and completing each of these tasks would require substantial time and effort. Importantly, their participant payment rate was already fixed for them. This would mean that the payment for Player A and Player B would be the same no matter how the tasks were distributed between them.

In the *no maltreatment* condition, participants were informed that Player A, the decider, could decide how they would like the tasks to be distributed between themselves and Player B, the recipient and Player B could only passively accept the offer made by the decider. In this game, Player A decided to assign two tasks to himself and six tasks to Player B. In the *previous maltreatment* condition, in addition to the information given above, participants were also informed that Player A (the current decider) was a recipient in the previous game. Importantly, for that game, the previous decider forced Player A to complete six (out of eight) tasks.

[1]Study 4 was conducted after all studies because it aimed to address the limitations of and extend the findings of Studies 1–3.

To measure moral judgements, participants were asked to indicate (a) how acceptable they thought it was for Player A to assign the tasks this way, (b) how morally right they thought it was for Player A to assign tasks this way and (c) how fair they thought it was for Player B to receive this assignment (6/8 tasks). These items were completed on 7-point Likert scales where 1 = *not at all* and 7 = *absolutely*. An overall moral permission score was calculated by averaging the scores of these items, with higher scores corresponding to a higher level of moral acceptability ($a = .90$).

To measure punishment behaviours, participants were told that although the decider (Player A) had already decided on the assignment, they, as the observer, could still take action to modify the result. In particular, they could reject or accept the offer. If they rejected the offer, Player A would have to complete all eight tasks. If they accepted the offer, Player B would have to complete the six tasks assigned to them, whereas Player A would complete only two tasks. Then, they responded on a 9-point Likert scale (1 = *definitely reject* and 9 = *definitely accept*).

Results and discussion

Consistent with the generalized compensation belief hypothesis, univariate tests with condition (previous maltreatment vs. no maltreatment) as a between-subjects factor showed that participants in the *previous maltreatment* condition judged the protagonist's act as significantly more morally acceptable relative to participants in the *no maltreatment* condition ($M = 4.05$, $SD = 1.74$ vs. $M = 3.18$, $SD = 1.84$, respectively), $F(1, 201) = 11.96$, $p = .001$, $\eta_p^2 = .056$. Participants were also less likely to punish this player via a reduced tendency to reject the protagonist's offer by learning they had previously received maltreatment ($M = 5.63$, $SD = 3.06$ vs. $M = 4.39$, $SD = 3.10$), $F(1, 201) = 8.26$, $p = .004$, $\eta_p^2 = .039$. These results remained the same after controlling for gender, age, education, income and perceived social rank; $F(1, 196) = 12.92$, $p < .001$, $\eta_p^2 = .062$; $F(1, 196) = 7.33$, $p = .007$, $\eta_p^2 = .036$.

STUDY 2

Study 2 aims to replicate and extend Study 1 by examining whether the generalized compensation belief process occurs when the two interaction rounds involve different forms of maltreatment (i.e. workload distribution vs. money distribution). For replication purposes, we also included a condition, wherein the form of the maltreatment of two interaction rounds was identical. In addition to people's moral evaluations of the perpetrator, we were also interested in how people would perceive the characters and traits of the perpetrator. Therefore, we also tested whether the condition effect could extend to perceptions of warmth—one of the two most fundamental dimensions of person perception (e.g. Fiske et al., 2007).

Method

Participants

We recruited 307 participants via Amazon's Mechanical Turk Prime ($M = 37.4$, $SD = 10.7$, 128 women, 66% European American, 26% African American, 8% other). Participants were randomly assigned to one of the three conditions (*no maltreatment*, *previous identical maltreatment* or *previous non-identical maltreatment*), resulting in approximately 100 participants in each condition. Participants received monetary compensation at the end of the study.

Procedure and measures

As in Study 1, participants were told they would observe something happen between two Mechanical Turk workers and would need to make a few judgements about it and take appropriate action. To make the findings more generalizable, half of the participants observed task distribution (eight tasks), whereas the other half observed money distribution (eight dollars) between the two players.

As in Study 1, participants in the *no maltreatment* condition were informed that Player A, the decider, could decide how they would like the eight tasks or dollars to be distributed between themselves and Player B, the recipient and Player B could only passively accept the decider's offer. In this game, Player A behaved in self-interested ways, assigning two tasks to themselves and six tasks to Play B (task distribution context), or assigning six dollars to themselves and two dollars to Player B (money distribution context).

Participants in the *previous identical maltreatment* condition received the same information, but they were further informed that Player A (the current decider) was also a recipient in the previous game. Importantly, for that game, the previous dictator let Player A complete six (out of eight) tasks or only gave Player A two (out of eight) dollars.

In the *previous non-identical maltreatment* condition, the additional information given was similar to that in the previous identical maltreatment condition, except that the maltreatment content between the previous and current games was deliberately made to be different. That is, if Player A distributed money unfairly in the current game, then participants were told that Player A had been treated unfairly regarding task assignment in the previous game, and if Player A distributed tasks unfairly in the current game, then participants were told that Player A had been treated unfairly regarding money assignment in the previous game.

To measure moral judgements, participants answered the same three questions as in Study 1. An overall moral permission score was calculated by averaging the scores of these items, with higher scores corresponding to a higher level of permission ($a = .90$). To measure punishment behaviours, participants were told that they could either reject or accept the offer. If they rejected the offer, Player A would have to complete all eight tasks (task distribution context) or receive zero dollars (money distribution context). Similarly, they responded on a 9-point Likert scale (1 = *definitely reject* to 9 = *definitely accept*).

For exploratory purposes,[2] we also measured warmth perception. Participants were asked to rate how tolerant, warm, good-natured, sincere, caring and likable they found Player A was on 7-point Likert scales (1 = *not at all*, 7 = *completely*). An overall warmth perception score was calculated by averaging the scores of these items, with higher scores indicating a higher level of warmth perception ($a = .97$).

Results and discussion

Univariate tests with condition (previous identical maltreatment vs. previous non-identical maltreatment vs. no maltreatment) as a between-subjects factor showed a main effect of the condition for moral permission: $F(2, 304) = 7.42$, $p = .001$, $\eta_p^2 = .047$. Further planned pairwise comparisons revealed that compared with the no maltreatment condition ($M = 3.46$, $SD = 1.80$), participants' likelihood to grant moral permission for the same act was significantly higher if they have learned about the protagonist's previously received maltreatment, for both identical maltreatment ($M = 4.36$, $SD = 1.84$), $F(1, 203) = 12.29$, $p = .001$, $\eta_p^2 = .057$ and non-identical maltreatment ($M = 4.25$, $SD = 1.77$), $F(1, 202) = 9.76$, $p = .002$, $\eta_p^2 = .046$. Whether the content of the received and the paid-forward maltreatment was identical did not make a difference: $F(1, 203) = 0.19$, $p = .661$, $\eta_p^2 = .001$.

The same pattern was observed for punishment behaviour: $F(2, 304) = 11.59$, $p < .001$, $\eta_p^2 = .071$. Post-hoc pairwise comparisons revealed that compared with the no maltreatment condition ($M = 4.38$,

[2]We also included the measure of materialism. For detailed measurement and results, please see Appendix S1.

SD = 3.10), participants were less likely to punish the player after learning about the maltreatment they previously received, for both identical maltreatment (*M* = 6.24, *SD* = 2.76), $F(1, 203) = 20.66$, $p < .001$, $\eta_p^2 = .092$ and non-identical maltreatment (*M* = 5.78, *SD* = 2.78), $F(1, 202) = 11.59$, $p = .001$, $\eta_p^2 = .054$. Whether the maltreatment content was identical did not make a difference: $F(1, 203) = 1.41$, $p = .237$, $\eta_p^2 = .007$.

Similar pattern also emerged for warmth perception: $F(2, 304) = 6.58$, $p = .002$, $\eta_p^2 = .042$. Further planned pairwise comparisons revealed that compared with the no maltreatment condition (*M* = 3.45, *SD* = 1.85), the player was perceived as warmer (less cold) if participants learned about the maltreatment the player previously received, for both identical maltreatment (*M* = 4.29, *SD* = 1.57), $F(1, 203) = 12.30$, $p = .001$, $\eta_p^2 = .057$ and non-identical maltreatment (*M* = 4.08, *SD* = 1.74), $F(1, 202) = 6.25$, $p = .013$, $\eta_p^2 = .030$. Whether the maltreatment content was identical did not make a difference: $F(1, 203) = 0.84$, $p = .361$, $\eta_p^2 = .004$.

Taken together, the results of Study 2 have conceptually replicated and extended the findings of Study 1. The results support the generalized compensation belief hypothesis and demonstrate that for the generalized compensation belief to occur, forms of previously received maltreatment and those paid forward do not need to be identical.

STUDY 3

The goal of Study 3 was to extend the findings of the first two studies by testing whether the generalized compensation belief would occur when a target had previously received maltreatment from a non-human target, because research has suggested that people also respond to unfairness caused by a computer (e.g. Ferdig & Mishra, 2004; Peterburs et al., 2017). To this end, participants observed a dictator distributing a given workload unfairly between themselves and a recipient in favour of the dictator. While half of the participants were further informed that the current dictator was treated unfairly by a computer in a previous game, the other half of the participants were not provided with such information. We predicted that participants would be more likely to morally permit and less likely to punish the dictator's negative actions once they knew the dictator had previously been treated unfairly even if the unfair treatment was from a computer.

Method

Participants

Two hundred and one participants (*M* = 35.3, *SD* = 9.88, 75 women, 63% European American, 27% African American, 10% others) were recruited via Amazon's Mechanical Turk Prime. Participants were randomly assigned to one of the two conditions (previous maltreatment or no maltreatment), resulting in approximately 100 participants in each condition. Participants received monetary compensation at the end of the study.

Procedure and measures

After reading the instructions and providing some general demographic information, participants were told to observe something that happened between two other people. The instructions were identical to those in Study 1. In the previous maltreatment condition, participants were informed that Player A (the current decider) was a recipient in the previous game. Importantly, for that game, according to random assignment by computer, Player A completed six (out of eight) tasks. Participants in the no maltreatment condition were not provided with this information. To measure moral judgements, participants answered

the same three questions as in Studies 1 and 2. An overall moral permission score was calculated by averaging the scores of these items, with higher scores corresponding to higher levels of permission ($a = .92$). To measure the punishment behaviour, participants answered the same question as in Studies 1 and 2. The order of presenting these measures was counterbalanced across participants.

Results and discussion

Conceptually replicating the first two studies, univariate tests with condition (previous maltreatment vs. no maltreatment) as a between-subjects factor showed that participants were significantly more likely to give moral permission for the same act after learning about Player A's previously received maltreatment by the computer ($M = 4.44$, $SD = 1.70$ vs. $M = 3.71$, $SD = 1.94$), $F(1, 199) = 8.13$, $p = .005$, $\eta_p^2 = .039$. Regarding behaviour, participants were also less likely to punish Player A via a reduced tendency to reject their offer after learning about the previously received maltreatment ($M = 6.06$, $SD = 2.79$ vs. $M = 4.98$, $SD = 2.89$), $F(1, 199) = 7.26$, $p = .008$, $\eta_p^2 = .035$.

Taken together, Studies 1–3 found that participants, as third parties, were more likely to morally permit and less likely to punish the same negative act once they knew about previous maltreatment the transgressor had received. This effect occurred even when the content of received and paid-forward maltreatment was non-identical (Study 2) and when the negative treatment was received from a non-human target (Study 3).

STUDY 4

Study 4 aimed to examine directly the mediating role of required compensation as the underlying mechanism. Of equal importance, Study 4 sought to rule out potential competing mechanisms. Therefore, we measured and controlled for equity sensitivity, generalized just-world beliefs, empathy and entitativity. In addition, Study 4 was designed to replicate the findings of Study 1 with a better control condition: Rather than receiving no information about the target's prior experience, participants were informed that the target had been treated equitably in the previous round to avoid the possibility that participants may have construed other possibilities on their own. We preregistered Study 4 on the OSF (https://osf.io/gy9pb/).

Method

Participants

Two hundred and fourteen participants were recruited via Amazon's Mechanical Turk Prime. Fifteen participants failed an attention check question and were thus excluded from analyses. This left 199 participants ($M = 39.6$, $SD = 11.8$, 95 women, 79% European American, 14% African American, 4% Asian, 3% others) in the final analysis. Participants were randomly assigned to one of the two conditions (previous maltreatment or previous fair treatment), resulting in approximately 100 participants in each condition. Participants received a small monetary compensation at the end of the study.

Procedure and measures

The study was conducted online using Qualtrics survey software. After reading the instructions and providing some general demographic information, participants were told to observe something that happened between two other people, make a few judgements about it, and take action that they found appropriate. The general and specific information provided in the previous maltreatment condition was

identical to that of Study 1. In the p*revious fair treatment* condition, participants were informed that Player A (the current decider) was a Recipient in the previous game. Importantly, for that game, the previous decider treated Player A fairly by letting them complete four (out of eight) tasks.

To measure required compensation, a 6-item required compensation scale was developed (see Appendix S1). Example items include, 'To what extent do you think Player A deserves some sort of compensation?' and, 'To what extent do you think Player A should expect some sort of compensation?' Participants were asked to indicate their responses on 7-point Likert scales (1 = *not at all*, 7 = *very much*). An overall required compensation score was calculated by averaging the scores across these items (a = .83), with higher scores corresponding to higher levels of required compensation. To measure moral judgements/permission (a = .92) and punishment behaviour, participants were asked to answer the same questions as in Studies 1–3.

To rule out competing mechanisms, we measured participants' empathy (a = .90), generalized just-world beliefs (a = .91) and equity sensitivity (a = .74). The order in which the measures were presented was randomized. See Appendix S1 for detailed measures.

As an attention check, participants were asked whether they thought the decider in the previous round and the current recipient (i.e. Player B) were the same person or not (i.e. entitativity). Those who failed this attention check question were excluded from the analysis.

Results and discussion

The main effect of informing participants about previous experience

Conceptually replicating the findings of prior studies, univariate tests with condition (maltreatment vs. fair treatment) as a between-subjects factor showed that participants in the *maltreatment* condition judged Player A's act as significantly more morally acceptable relative to participants in the *fair treatment* condition (M = 3.95, SD = 1.81 vs. M = 2.83, SD = 1.72), $F(1, 197) = 19.86$, $p < .001$, $\eta_p^2 = .092$. Participants were also less likely to punish Player A, showing an increased tendency to accept their offer by learning about the previously received maltreatment compared with fair treatment (M = 5.10, SD = 3.11 vs. M = 3.67, SD = 2.90), $F(1, 197) = 11.20$, p = .001, $\eta_p^2 = .054$. In addition, participants believed that Player A should receive a higher level of compensation in the previous maltreatment condition than in the fair treatment condition (M = 4.57, SD = 1.36 vs. M = 4.06, SD = 1.39), $F(1, 197) = 6.89$, p = .009, $\eta_p^2 = .034$. Importantly, these results remained the same after controlling for empathy, equity sensitivity and generalized just-world beliefs, by entering them as covariates in the model, $F(1, 194) = 20.06$, $p < .001$, $\eta_p^2 = .094$; $F(1, 194) = 9.01$, p = .003, $\eta_p^2 = .044$; $F(1, 194) = 5.82$, p = .017, $\eta_p^2 = .029$, respectively.

The mediating role of required compensation

As shown in Figure 2, the condition (previous maltreatment or fair treatment) predicted moral permission and required compensation, and required compensation predicted moral permission. A bootstrapped analysis (Preacher & Hayes, 2008; 5000 resamples) revealed that the 95% confidence interval (CI) for the indirect effect of condition on moral permission did not include zero, $a \times b = 0.083$, $SE = 0.034$, 95% CI [0.023, 0.157], indicating that the mediating role of required compensation was significant. Importantly, the mediation model remained significant after controlling for empathy, equity sensitivity and generalized just-world beliefs, by entering them as covariates in the model, $a \times b = 0.063$, $SE = 0.029$, 95% CI [0.012, 0.129].

Similarly, as shown in Figure 3, the condition (previous maltreatment or previous fair treatment) predicted remission of punishment as well as required compensation, and required compensation predicted remission of punishment. A bootstrapped analysis (Preacher & Hayes, 2008; 5000 resamples) revealed that the 95% CI for the indirect effect of condition on remission of punishment did not include

zero, $a \times b = 0.092$, $SE = 0.035$, 95% CI [0.024, 0.161], again showing a significant mediation effect. Importantly, the mediation model remained significant after controlling for empathy, equity sensitivity and generalized just-world beliefs, $a \times b = 0.072$, $SE = 0.031$, 95% CI [0.015, 0.140].

STUDY 5

In Study 5, we aimed to test the generalized compensation belief hypothesis using more diverse real-life scenarios involving both material (e.g. property loss) and non-material (e.g. social exclusion) offences, as well as to examine whether this belief exists in non-hierarchical relations (between the perpetrator and the victim), beyond the hierarchical relations examined in Studies 1–4. To further test whether participants apply the generalized compensation belief to themselves, we examined participants' moral permission to pay forward maltreatment as an observer (third-party moral judgement) and the tendency to pay forward maltreatment as the perpetrator (i.e. first-party behavioural intentions). We predicted that (a) participants would be more likely to morally permit and show an increased tendency to engage in the same act once they knew about the maltreatment previously received by the protagonists and (b) these reactions would be accounted for by required compensation.

Method

Participants

We recruited 201 participants (114 women, $M_{age} = 42.4$, $SD = 12.7$, 78% European American, 9% African American, 7% Asian American, 6% other) via Amazon's Mechanical Turk. Participants were randomly assigned to one of the two conditions (no maltreatment or previous maltreatment), resulting in approx-

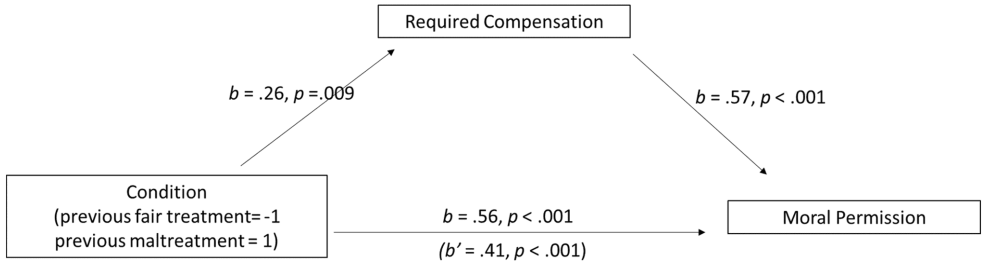

FIGURE 2 Mediation model for the effect of condition on moral permission via required compensation (Study 4). Values for the indirect path (i.e. when controlling for the mediator) are shown in parentheses.

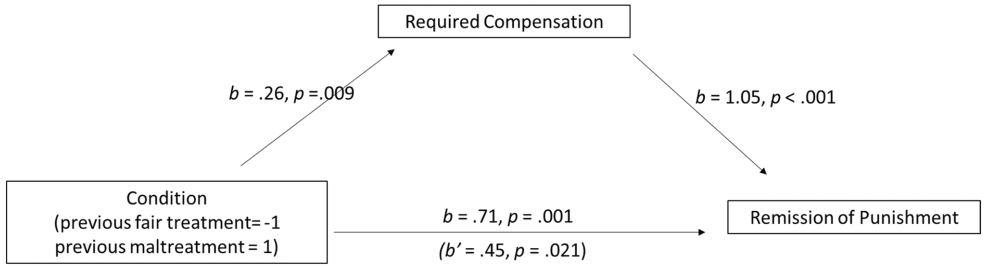

FIGURE 3 Mediation model for the effect of condition on remission of punishment via required compensation (Study 4). Values for the indirect path (i.e. when controlling for the mediator) are shown in parentheses.

imately 100 people in each condition. Participants received monetary compensation at the end of the study.

Procedure and measures

The study was conducted online using Qualtrics survey software. After reporting basic demographic information, similar to previous studies, participants were randomly assigned to one of the two conditions (i.e. previous maltreatment or no maltreatment). In the *no maltreatment* condition, participants read, for example, 'There is a newcomer in Ken/Kenda's department. Ken/Kenda decides to ignore this person completely, for example, by pretending not seeing or not talking to this person at all and refusing to offer any help no matter how small and easy it is for Ken/Kenda to do so'.

In the *previous maltreatment* condition, participants read, 'There is a newcomer in Ken/Kenda's department. Ken/Kenda decides to ignore this person completely, for example, by pretending not seeing or not talking to this person at all and refusing to offer any help no matter how small and easy it is for Ken/Kenda to do so. In fact, Ken/Kenda remembers very clearly this was how he/she was once treated as a newcomer for his/her first job.'

The protagonist's gender was matched with the participants' gender, for all scenarios used in the current study (i.e. two maltreatments involving tangible resources and two maltreatments involving non-tangible resources). The order in which the four scenarios were presented was randomized. See Appendix S1 for all scenarios.

To measure participants' moral judgement of such behaviour as observers, they were asked to rate (a) how acceptable Ken/Kenda's act is, (b) how morally right Ken/Kenda's act is, and (c) how fair such an act is to the newcomer, on 7-point Likert scales (1 = *not at all*, 7 = *absolutely*). An overall moral permission was calculated by averaging the scores of these items across four scenarios (a = .86). To measure participants' own behavioural tendencies, they indicated how likely they were to engage in the same act (1 = *not at all*, 7 = *absolutely*). An overall behavioural tendency score was calculated by averaging the item across scenarios (a = .70). To measure required compensation, the same 6-item required compensation scale as in prior studies that fits the context of each scenario was used. Example items included, 'To what extent do you think Ken/Kenda is entitled to some sort of compensation?' and, 'To what extent do you think Ken/Kenda should expect some compensation?' Responses were made on 7-point Likert scales (1 = *not at all*, 7 = *absolutely*). An overall required compensation score was calculated by averaging the scores of these items across scenarios (a = .89). The order in which required compensation, participants' moral judgements and their behavioural tendency were measured was counterbalanced across participants.

Results and discussion

The main effect of the condition

Univariate tests with condition (previous maltreatment vs. no maltreatment) as a between-subjects factor showed that the likelihood of giving moral permission, as observers, of the same act was higher for those in the previous maltreatment condition than it was for those in the no maltreatment condition (M = 2.50, SD = 0.79 vs. M = 1.73, SD = 0.97), $F(1, 199) = 37.91$, $p < .001$, $\eta_p^2 = .160$. Similarly, participants in the previous maltreatment condition reported a greater intention to engage in the same act than those in the no maltreatment condition did (M = 2.46, SD = 0.95 vs. M = 1.69, SD = 1.07), $F(1, 199) = 28.63$, $p < .001$, $\eta_p^2 = .126$. As predicted, participants in the previous maltreatment condition believed more strongly than did those in the no maltreatment condition that protagonists deserved compensation (M = 2.77, SD = 0.77 vs. M = 2.42, SD = 1.10), $F(1, 199) = 6.62$, $p = .011$, $\eta_p^2 = .032$.

The mediating role of required compensation

As shown in Figure 4, the condition (no maltreatment or previous maltreatment) predicted moral permission as well as required compensation, and required compensation predicted moral permission. A bootstrap analysis (Preacher & Hayes, 2008; 5000 resamples) revealed that the 95% CI for the indirect effect of the condition on moral permission did not include zero, $a \times b = .08$, $SE = .03$, 95% CI [0.019, 0.171], indicating that required compensation played a significant mediating role.

Similarly, as shown in Figure 5, the condition (no maltreatment or previous maltreatment) predicted one's behavioural intention to engage in the same act as well as required compensation, and required compensation predicted behavioural intention. A bootstrap analysis (Preacher & Hayes, 2008; 5000 resamples) revealed that the 95% CI for the indirect effect of the condition on behavioural intention did not include zero, $a \times b = .08$, $SE = .04$, 95% CI [0.020, 0.158], again indicating a significant mediation model.

GENERAL DISCUSSION

Across five studies, we found consistent evidence that people hold a generalized compensation belief (i.e. the same maltreatment would be judged as more acceptable after learning about an actor's previously received maltreatment). This belief applied to a relatively broad range of situations and forms of treatment: The compensation can take the same form as the initial unfair experience or a different one (Study 2); the source of the unfair treatment can be human or non-human (Study 3); the belief can apply to both hierarchical (Studies 1–4) and non-hierarchical relations (Study 5); and the maltreatment can be both material (e.g. property loss) and relational (e.g. social exclusion; Study 5). Required compensation for the perpetrator's previous maltreatment acts as the underlying mechanism (Studies 4–5), even after controlling for competing mechanisms, including equity sensitivity, generalized just-world beliefs and empathy (Study 4). The generalized compensation belief guides participants' moral permission to pay forward maltreatment as an observer (third-party moral judgement), as well as influences their own behavioural intentions to pay forward maltreatment as a perpetrator (i.e. first-party behavioural intentions, Study 5).

Existing findings have shown that victims of previous injustice or mistreatment tend to pay the same act forward, hurting innocent people who were not involved in the initial interaction (e.g. Gray et al., 2014; Strang et al., 2016), and 'displaced revenge' towards an innocent person can be especially satisfying when the transgressor and the displaced target belong to a group that is perceived as highly entitative (Sjöström & Gollwitzer, 2015; Sjöström et al., 2018). Our studies systematically examined how observers morally evaluate a person's act of paying forward the previous mistreatment, a moral judgement perspective that has not received enough attention in previous research. We found that people hold a generalized compensation belief—the perpetrator's previously received maltreatment makes their immoral act more morally permitted, an effect that is robust across a variety of circumstances and different forms of maltreatment. Therefore, complementing the previous findings that people tend to pay forward previous maltreatment out of self-interest or negative affect, our studies further reveal that people also hold a general belief that makes them more likely to morally permit and tolerate paying-forward previous maltreatment to innocent victims. Most moral psychology research has focused on decontextualized moral judgement (e.g. Schein, 2020), and our findings contribute to a deeper understanding of the contextualized nature of such judgement.

The existence of a generalized compensation belief is in line with the theories of person-specific equity and equity with the world, which state that individuals attempt to maintain net equity (i.e. a balance between loss and gain) both within and across relationships (Austin & Walster, 1974; Homans, 1961). Whereas traditional person-specific equity and equity with the world theories are mainly concerned about how I (i.e. the first-person perspective) actually form balanced relations with others (out of potential motives, e.g. self-interest and negative affect), generalized compensation belief examines individuals' perception of how general social interactions involving mistreatments *should* be, and it shows that indi-

viduals have a fundamental moral belief in balancing social interactions and permit paying-forward moral mistreatment, even when their self-interest remains relatively irrelevant.

At first sight, the generalized compensation belief may be inconsistent with the predictions of some theories. For example, the theory of morality-as-cooperation argues that solutions to problems of cooperation constitute human morality (Curry et al., 2019a, 2019b), thus whether an act is considered morally acceptable or not should depend on whether it promotes cooperation. Generalized compensation belief permits paying forward a harmful act and does not promote immediate interpersonal cooperation (if not promote the opposite). However, it is worth pointing out that the theory of morality-as-cooperation makes no specific predictions about how we make a moral judgement in particular proximate contexts. The generalized compensation belief could still be compatible with the ultimate function of ensuring generalized reciprocity and promoting cooperation in the end, a possibility worth examining using evolutionary psychology approaches.

In addition, according to system justification theory, people may defend and legitimize existing social and economic arrangements by rationalizing theirs and others' sufferings and even blaming the victims (Jost et al., 2004; Jost & Hunyady, 2002). However, we showed that people did not blame transgressors who were the victims of previous maltreatment, but they are more likely to morally permit transgressors to seek compensation by hurting an innocent target. The findings might seem inconsistent with the predictions of system justification theory if we only focus on one-round interaction, but the way people rationalize theirs and others' suffering may be more complex than previously theorized. In multiple rounds of social interaction, for example observers may instead blame the new innocent victim and rationalize his/her suffering after knowing the perpetrator's history of maltreatment, a possibility that is consistent with our findings. Examining people's judgement about the transgressor's and the new victim's deservingness of harm may help test this possibility.

More broadly, the generalized compensation belief might have implications for paid-forward maltreatment at the group and societal level. For instance, during various social movements, protesters sometimes

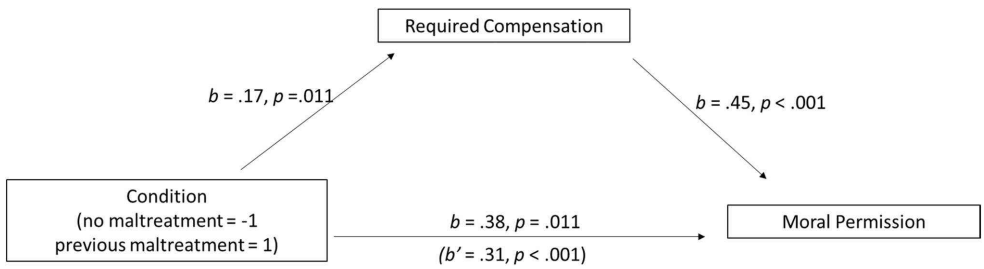

FIGURE 4 Mediation model for the effect of the condition on moral permission via required compensation (Study 5). Values for the indirect path (i.e. when controlling for the mediator) are shown in parentheses.

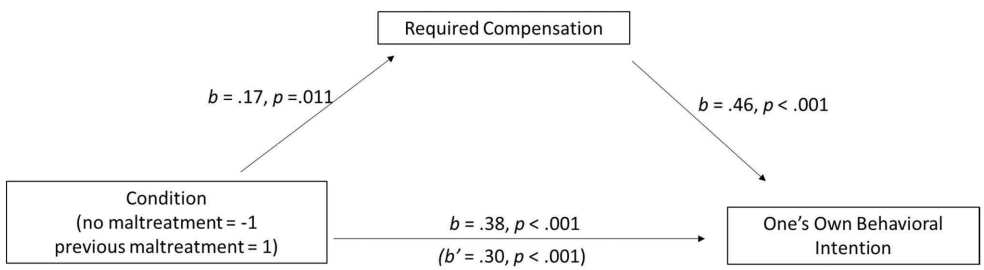

FIGURE 5 Mediation model for the effect of the condition on the tendency to engage in an immoral act via required compensation (Study 5). Values for the indirect path (i.e. when controlling for the mediator) are shown in parentheses.

resort to immoral behaviours (e.g. damaging public facilities) that cause trouble for and even hurt innocent others, to accuse certain targets (e.g. governmental policy) for the maltreatment they have received previously. Consistent with the generalized compensation belief, their acts could receive permission or at least a remission of punishment from observers (who are the majority of people in any social movement), creating new chains of ill acts in society. According to religious teachings and psychological findings (e.g. Davis et al., 2021; Holmgren, 1993; Loeffler et al., 2018; Schumann & Walton, 2022; Thompson et al., 2005; Warmke, 2016; Witvliet et al., 2004), when facing maltreatment and suffering, it is more efficacious and adaptive to treat these experiences as an opportunity to mature and grow rather than ruminating on the negative experience. Our findings suggest that such an expectation may contradict a natural moral belief people tend to hold, despite that it could still be an ideal for people to strive for.

Limitations and future directions

We provided consistent evidence that people hold a generalized compensation belief, but it is worth noting that across studies, people in general do not find harming an innocent person as morally right (Studies 1–4: $M = 3.29$; Study 5: $M = 1.73$, 7-point Likert scale, 1 = *unacceptable/morally right*). Although the acceptance level increased significantly after knowing the maltreatment a perpetrator previously received, the permission level is still not high (Studies 1–4: $M = 4.21$; Study 5: $M = 2.50$, 7-point Likert scale). Therefore, the generalized compensation belief does not mean that people view paying-forward maltreatment as morally *good*, but it shows that people become more morally *tolerant* of others' immorality after knowing about their previous suffering. Nevertheless, it is crucial for future studies to test interventions for this generalized compensation belief directly, given that holding such a belief is extremely harmful not just for the people involved in immediate interactions but the society as a whole. Current research has demonstrated that people morally permit and engage in paying unfair treatment forward due to a desire for compensation, and thus, future research could try strategies to decrease observers' belief that B is entitled to compensation. In addition, if participants were encouraged to take the perspective of the new innocent victim who was not involved in the initial round of interaction, then would they still morally permit paying forward the misconduct?

In addition, the strength of the generalized compensation belief could be subject to the influence of potential moderators. For instance, to make the situations relatable to participants, the current research tested situations that people could easily encounter in real life (e.g. property loss and social exclusion), involving people who may share similar experiences as themselves (e.g. being MTurks). It is possible that people may be more likely to put themselves in the transgressor's (B's) position in familiar situations (and thus morally permit the actions), compared with situations that are unfamiliar to people. Moreover, in the current research, the degrees of severity between previously received maltreatment and later passed-on maltreatment closely match. It would be interesting for future studies to examine whether this effect would become weaker or stronger if the previously received maltreatment is more or less severe than the paying-forward maltreatment (e.g. how morally permissible is it for someone to pay forward previous maltreatment of social exclusion by engaging in mass shooting?).

Our findings raise an interesting question about how this generalized compensation belief is acquired. Given that from very early in life, children have a strong moral sense, sanctioning and punishing even mild moral transgressions as third parties (e.g. Yang et al., 2018), it is surprising that adults would be more likely to permit maltreatment to others simply by learning about previous maltreatment the perpetrator received. It is possible that this tendency is developed relatively late in life, after children themselves have the experience of engaging in similar paying-forward transgressions to seek compensation or being exposed to explicit social discourse regarding how receiving previous maltreatment would lead to present transgressions. Alternatively, it is also possible that the generalized compensation belief is simply an extension of our general sense of fairness, applied to multi-round interactions across relationships. Future studies could examine the developmental process by testing whether this belief emerges relatively

early or relatively late in life and grows stronger with age (e.g. as part of our natural psychological machinery or only gained through social learning).

In conclusion, across five studies, we found consistent evidence for a generalized compensation belief that individuals are more likely to morally tolerate and accept unfair treatment to an innocent person if knowing the perpetrator has received previous maltreatment (and thus need a means to compensate for the loss). Therefore, people draw from an actor's past to make moral judgement about the present. We may be mired in a cycle of unfair, unjust and immoral actions and reactions, unless organizations and societies can rectify prior injustices through systemic changes or individuals realize better alternatives exist to compensate for the wrongs of the past.

AUTHOR CONTRIBUTIONS

Xijing Wang: Conceptualization; data curation; formal analysis; investigation; methodology; project administration; resources; validation; writing – original draft; writing – review and editing. **Zhansheng Chen:** Conceptualization; data curation; funding acquisition; investigation; methodology; project administration; resources; supervision; validation; writing – review and editing. **Daryl R. Van Tongeren:** Conceptualization; funding acquisition; investigation; methodology; resources; validation; writing – review and editing. **C. Nathan DeWall:** Conceptualization; funding acquisition; investigation; validation; writing – review and editing. **Fan Yang:** Conceptualization; methodology; validation; writing – review and editing.

ACKNOWLEDGEMENTS

This research was supported by grants from the John Templeton Foundation (60958 to Chen and DeWall; 60734 to Van Tongeren and DeWall).

CONFLICT OF INTEREST

None.

DATA AVAILABILITY STATEMENT

Data for the current research can be accessed via https://osf.io/dpkr4/?view_only=9116043f35e44db5b7c72872d2943337.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

How to cite this article: Wang, X., Chen, Z., Van Tongeren, D. R., DeWall, C. N., & Yang, F. (2022). Permitting immoral behaviour: A generalized compensation belief hypothesis. *British Journal of Psychology*, *00*, 1–18. https://doi.org/10.1111/bjop.12593