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Parochial Empathy Occurs Regardless of Causal Attribution

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People are less likely to exhibit empathy and more likely to exhibit counter-empathy (i.e., Schadenfreude and Glückschmerz) toward those belonging to outgroups. Most studies, however, focused on empathy toward events with unclear cause. Therefore, it was unknown whether parochial empathy occurs even when the cause of the events is clear. This study examined parochial empathy by measuring empathy for ingroup or outgroup members who experienced positive or negative events. The present experiment with 52 university participants found that regardless of the clarity of the cause, participants exhibited parochial empathy. This implies that causal attribution may not be the single determinant of parochial empathy.

Keywords
parochial empathy, empathy, schadenfreude, glückschmerz, ingroup, causal attribution

Introduction

Empathy is generally understood as the ability to comprehend and share others' perspectives and feelings (e.g., Zaki, 2014). It includes both positive and negative affective responses to the positive and negative experience of others (e.g., Cikara et al., 2014). Empathy fosters social connection and promotes helping and prosocial behaviors (Batson, 2011), thus serving as a cornerstone of cooperating societies. However, people sometimes experience positive feelings about others' suffering (i.e., Schadenfreude) and negative feelings about others' happiness (i.e., Glückschmerz; Smith, 2013). Some studies pointed out that Schadenfreude exaggerates intergroup conflict (e.g., Cikara, 2015). Cikara et al. (2014) termed these two emotions "counter-empathy," as they tend to fuel confrontation and conflict. Evolutionary sciences have focused on empathy and counter-empathy as proximate psychological mechanisms of cooperation and conflict (e.g., Kruger, 2003).

People do not consistently exhibit empathy toward others, especially those belonging to different racial, political, or social groups (e.g., Behler & Berry, 2022; Bruneau et al., 2015, 2017; Cikara et al., 2014; Fourie & Moore-Berg, 2022; Hudson et al., 2019; Plieger et al., 2022). This phenomenon is referred to as intergroup empathy bias (Cikara et al., 2014; Cikara et al., 2011) or parochial empathy (Behler & Berry, 2022). In a pioneering study on parochial empathy, Cikara et al. (2014) presented participants with descriptions of positive or negative events experienced by hypothetical ingroup or outgroup members and examined the participants' degree of empathy and counter-empathy. The results demonstrated the existence of parochial empathy: Participants were more likely to exhibit empathy and less likely to exhibit counter-empathy toward ingroup members than outgroup members. Bruneau et al. (2017) examined parochial empathy among real-world groups (Americans, Hungarians and Greeks) and found that people exhibited greater empathy toward ingroup members (i.e., people in the same countries) compared to outgroup members (i.e., people in different countries). Furthermore, some studies have investigated moderating factors for the intensity of parochial empathy. For example, Bruneau et al. (2015) showed that providing narrative descriptions of targets' experiences and characteristics, particularly their thoughts and hopes, can decrease parochial empathy. Hudson et al. (2019) found that people with high social dominance orientation (SDO) tend to exhibit stronger parochial empathy.

Thus, many studies have evidenced the existence of parochial empathy, albeit with two limitations. First, these studies were conducted among Europeans, Americans, or Africans (Fourie & Moore-Berg, 2022) and not East Asians. Considering cultural differences, such as relational mobility (Yuki et al., 2007) and cultural construal of self (Markus & Kitayama, 1991), it is necessary to confirm whether parochial empathy exists in East Asian countries.

Second, and more importantly, it remains unclear whether parochial empathy arises even when the causes of events are evident. Most studies on parochial empathy (e.g., Cikara et al., 2014) presented participants with descriptions of various events that ingroup or outgroup members experienced and asked participants to infer their level of empathy with the target person. These studies were replete with events where the causality was unclear. For example, Cikara et al. (2014) and Hudson et al. (2019) used the sentence, "Lydia/Ryan missed the bus, which left right as she/he arrived at the station." However, there were no descriptions regarding why Lydia/Ryan missed the bus. Therefore, it is uncertain whether people exhibited parochial empathy even when presented with events with obvious causes (e.g., "Mike broke his computer *because he had spilled his drink*.").

Generally, in the case of events with unclear causes, observers may have the capacity to consider potential causes. Thus, people may interpret events favorably toward ingroup members. For example, when an ingroup member experiences a positive event (e.g., "A person was invited to the party by their friends"), people might attribute the causes to internal factors (e.g., "They likely build good

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relationships with their friends on a daily basis"). However, when an outgroup member experiences a positive event, people might attribute the causes to external factors (e.g., "There were likely insufficient attendees for the party"). In the case of negative events (e.g., "A person stepped on dog feces"), people might attribute the causes to internal factors for outgroup members (e.g., "They may have been careless") and external factors for ingroup members (e.g., "They may have had bad luck"). Previous studies have shown that empathic responses toward others can vary depending on how observers attribute causality (e.g., Weiner, 1980). If such biased causal attribution indeed leads to parochial empathy, then it may be less likely to manifest when causes are obvious.

Thus, it is important to examine whether parochial empathy arises for events with obvious causes. In sum, the present study aimed to investigate 1) whether parochial empathy arises in East Asian cultural contexts, and 2) whether parochial empathy arises toward events with obvious causes.

Methods

Participants & design

We recruited 52 Japanese university students (29 men, 22 women, 1 other; M_{age} = 20.19, SD = 2.04). They were incentivized with course credits for their participation. The experiment employed a two-factor within-subjects design of 2 (group: ingroup/outgroup) by 2 (cause: obvious/unclear).

Stimulus

As in previous studies (e.g., Cikara et al., 2014), we presented participants with descriptions of 16 events experienced by members of their ingroup or outgroup. Events comprised an equal number of obvious-cause and unclear-cause events, and positive and negative events. To determine which events were classified as obvious-cause and unclear-cause, we conducted a pilot survey (N = 13), wherein participants were presented with a total of 32 events. They read and evaluated the events using a four-point scale (1 = unclear cause, 4 = obvious cause). Based on the results, we selected four positive and negative items each from the highest average (Ms > 3.23) and from the lowest average (Ms < 1.15) as the obvious-cause events and the unclear-cause events, respectively, as stimuli of this experiment (see Supplementary Materials). The examples of events are as follows:

[Positive & Obvious cause] N passed the exam because they prepared carefully.

[Negative & Obvious cause] J overslept because they forgot to set an alarm.

[Positive & Unclear cause] F could eat delicious sandwiches.

[Negative & Unclear cause] P lost their house key.

Procedure

First, we divided the participants into two groups, adapting the procedure employed by Cikara et al. (2014). Participants answered five questions regarding their personalities, extracted from the personality inventory (Gosling et al., 2003; Oshio et al., 2012). Participants were ostensibly informed that the answers provided to these questions were used to assign participants to a hypothetical team (either the Tigers or the Dragons). Subsequently, participants were asked to answer three questions about their identification with each group ("I [value/like/feel connected to] the [Tigers/Dragons]."), utilizing an 11-point scale (0 = strongly disagree, 10 = strongly agree; $\alpha_{ingroup}$ = .86, $\alpha_{outgroup}$ = .85; Cikara et al., 2014).

Next, the participants were ostensibly informed that the two groups were engaging in a problem-solving task, in which their team members had completed 82 tasks, while the opposing team members had completed 84. They were also informed that both groups were in a competitive relationship, wherein the goal was to be the first team to complete 100 tasks, with those on the winning team could participate in a lottery where 1 of 20 people would receive a 500-yen bookstore gift card. It was emphasized that only the first team to complete the tasks would win the prize. This procedure was based on the competitive condition design of Cikara et al. (2014), except that this study only paid a subset of the participants via a lottery, whereas Cikara et al. (2014) had all the participants in the winning team receive a small bonus.

Subsequently, the participants read 16 events that ingroup or outgroup members had experienced, with the cover story that the more they knew about the other member's personal experiences, the better they would perform on the problem-solving task. The event descriptions were accompanied by images of a tiger or dragon so that participants could easily recognize the targets' team affiliation. The images were sourced from the same figure (Ryukozu; https://colbase.nich.go.jp/collection_items/tnm/A-5418?locale=ja). Participants evaluated how good (bad) they felt for each event via an 11-point scale (0 = do not feel good (bad) at all, 10 = feel extremely good (bad)), as Cikara et al. (2014).

Finally, participants answered two manipulation check questions: first, on affiliation recognition, "Which team are you on?" (1 = the Tigers, 2 = the Dragons); second, on the relationship between groups, "How was the relationship between two groups?" (1 = competitive, 2 = cooperative) (Cikara et al., 2014). After all the questions were completed, the participants were briefed on the experiments' original purpose, and the problem-solving task would not be conducted. All the participants who wished to have a chance at the lottery could join in, regardless of their team.

Results

The manipulation check revealed that 1 out of 52 people answered incorrectly regarding affiliation recognition; while 13 out of 52 people answered incorrectly regarding the relationship between groups. We analyzed the 38 participants who correctly answered both questions. The analysis that included participants who incorrectly answered the questions is described at the supplementary materials. The descriptive statistics of dependent variables are presented in Table 1. Regardless of the targets' group membership, empathy tends to be higher than counter-empathy.

A paired t-test for group identity revealed that ingroup identity (M = 5.90, SD = 2.38) was significantly higher than outgroup identity (M = 3.24, SD = 1.96; $t(37)$ = 7.23,

Table 1
Descriptive statistics of all the variables (N = 38).

	Ingroup				Outgroup			
	Obvious		Unclear		Obvious		Unclear	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Positive feelings about positive events	6.68	2.32	6.50	2.41	5.33	2.33	4.88	2.24
Negative feelings about negative events	6.34	2.59	5.75	2.24	5.08	2.24	4.53	2.31
Negative feelings about positive events (i.e., Glückschmerz)	2.11	2.10	1.74	1.83	3.21	2.83	2.96	2.31
Positive feelings about negative events (i.e., Schadenfreude)	1.70	1.75	1.84	1.56	3.05	2.49	2.50	2.27

$p < .001$, $d = 1.22$), implying that the group manipulation was successful.

We conducted a two-way analysis of variance (ANOVA) with group (ingroup/outgroup) and cause (obvious/unclear) as independent variables, and positive feelings for positive events as a dependent variable. The main effect of the group was significant: Positive feeling for the ingroup was significantly higher than that for the outgroup ($F(1, 37) = 22.22$, $p < .001$, $\eta_p^2 = .38$). This indicates that participants were more likely to empathize with their ingroup members than with outgroup members. Regarding the clarity of cause, the obvious-cause condition was significantly higher than the unclear-cause condition ($F(1, 37) = 4.90$, $p = .033$, $\eta_p^2 = .12$). The interaction effect of the group and cause was not significant ($F(1, 37) = 0.45$, $p = .508$, $\eta_p^2 = .01$).

We also conducted a two-way ANOVA with group (ingroup/outgroup) and cause (obvious/unclear) as independent variables, and negative feelings for negative events as the dependent variable. The main effect of the group was significant: Negative feeling for the ingroup was significantly higher than that for the outgroup ($F(1, 37) = 14.55$, $p < .001$, $\eta_p^2 = .28$). Thus, participants were more likely to empathize with their ingroup members than with outgroup members. Regarding the clarity of cause, the obvious-cause condition was significantly higher than the unclear-cause condition ($F(1, 37) = 7.06$, $p = .012$, $\eta_p^2 = .16$). The interaction was not significant ($F(1, 37) = 0.01$, $p = .918$, $\eta_p^2 < .01$).

Next, we conducted a two-way ANOVA with group (ingroup/outgroup) and cause (obvious/unclear) as independent variables, and negative feelings for positive events (i.e., Glückschmerz) as a dependent variable. The main effect of the group was significant: Negative feeling for the ingroup was significantly lower than that for the outgroup ($F(1, 37) = 22.65$, $p < .001$, $\eta_p^2 = .38$). Thus, participants exhibited greater counter-empathy for outgroup members than ingroup members. Regarding the clarity of cause, there were no significant differences ($F(1, 37) = 1.84$, $p = .183$, $\eta_p^2 = .05$). The interaction was not significant ($F(1, 37) = 0.09$, $p = .766$, $\eta_p^2 < .01$).

Finally, we conducted a two-way ANOVA with group (ingroup/outgroup) and cause (obvious/unclear) as independent variables, and positive feelings for negative events (i.e., Schadenfreude) as a dependent variable. The main effect of the group was significant: Positive feeling for the ingroup was significantly lower than that for the outgroup ($F(1, 37) = 11.01$, $p = .002$, $\eta_p^2 = .23$). Regarding the clarity of cause, there were no significant differences ($F(1, 37) = 1.64$, $p = .208$, $\eta_p^2 = .04$). The interaction between group and clarity of cause was significant ($F(1, 37) = 8.11$, $p = .007$, $\eta_p^2 = .18$); however, in both obvious-cause and unclear-cause conditions, Schadenfreude was higher for the outgroup than for the ingroup condition (obvious-cause: $F(1, 37) = 15.51$, $p < .001$, $\eta_p^2 = .30$; unclear-cause: $F(1, 37) = 4.52$, $p = .040$, $\eta_p^2 = .11$). Thus, participants exhibited greater counter-empathy for outgroup members than for ingroup members, regardless of the clarity of cause.

Discussion

Empathy and counter-empathy are fundamental social emotions that underlie human cooperation and conflict, and have thusly garnered attention in various fields such as evolutionary biology (e.g., De Waal, 2012), neurological science (e.g., Decety et al., 2016) and social psychology (e.g., Batson, 2011). Recent studies have demonstrated the existence of parochial empathy, whereby individuals exhibit higher empathy and lower counter-empathy toward ingroup members than outgroup members (e.g., Behler & Berry, 2022; Bruneau et al., 2015, 2017; Cikara et al., 2014; Fourie & Moore-Berg, 2022; Hudson et al., 2019; Plieger et al., 2022). The present study aimed to expand upon these findings by investigating whether parochial empathy occurs among Japanese people, and whether the clarity of the causes of events modifies the strength of parochial empathy. The present experiment on Japanese individuals showed that, regardless of the clarity of causes, empathy was significantly higher toward ingroup members than toward outgroup members, and counter-empathy was significantly higher toward outgroup members than ingroup members. Thus, parochial empathy was robustly observed.

This study offers two novel contributions to studies on parochial empathy. First, this study is the first examination of parochial empathy in an East Asian context, as previous studies (e.g., Cikara et al., 2014) have not explored the phenomenon within this cultural milieu. Second, and more importantly, our findings revealed that parochial empathy is exhibited regardless of the clarity of the event's cause. Previous studies have shown that when the target events have obscure causes, parochial empathy arises. However, if biased causal attribution to these events generates parochial empathy, then parochial empathy might not occur in response to events with obvious causes. Nevertheless, the present study revealed that parochial empathy occurred even when the cause was evident, implying that distorted causal attribution may not be the sole determinant of parochial empathy. Rather, other factors, such as the

motivation to maintain positive social identity (c.f., social identity theory; Tajfel et al., 1971), concern for reputation from ingroup members (e.g., Mifune et al., 2010), or social norms dictating positive reactions to ingroup members, may play a role in the manifestation of parochial empathy. Future studies are needed to understand the underlying mechanism of parochial empathy.

Limitations and future directions should be noted. First, it should be emphasized that although parochial empathy was robustly observed, counter-empathy was comparatively lower than empathy, even in the outgroup condition. This suggests that parochial empathy might not be so strong as to cause real-world intergroup conflicts. Second, efforts should be made to mitigate the lack of ecological validity, such as utilizing real-world groups instead of hypothetical ones, as in Bruneau et al. (2015). Third, the present participants were limited to university students; thus, the result might vary depending on age groups or affiliations. Fourth, the present study did not ask for participants' causal attribution for each event. Thus, additional studies are needed to investigate the effect of causal attribution on parochial empathy. Finally, although this research did not focus on interventions to reduce parochial empathy, it is crucial to investigate methods for reducing such biases to foster a more inclusive and cooperative society. By addressing these issues in future research, we can deepen the understanding of parochial empathy.

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Author contribution

RK and YK developed the study concept and design, and RK collected data. RK and YK analyzed the data and wrote the manuscript.

Ethical statement

The study protocol was approved by the Ethics Committee of Osaka Metropolitan University.

Data accessibility & program code

All data and code are available at https://osf.io/9253h/.

Supplementary material

Supplementary materials are available at https://osf.io/9253h/.

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