別紙４

報告番号	※　　第　　号

主　論　文　の　要　旨

論文題目	Empathy and utilitarian judgment in sacrificial dilemmas
氏　　名	高松 礼奈

論　文　内　容　の　要　旨

The studies presented in this thesis examine how empathy affects utilitarian judgment in sacrificial dilemmas. Specifically, it explores the role of empathy in perceiving harm and endorsing a harmful action for the utilitarian end.

Is it morally permissible to harm one person to save lives of several people? In a typical dilemma, there are several people (the saved) who are saved by sacrificing one person (the victim). The majority endorses harm in low-conflict but not in high-conflict dilemmas. That is, over 80% of respondents make a utilitarian judgment in low-conflict dilemmas, but less than 30% say yes. The distinction between low and high-conflict dilemmas is the extent to which negative emotions are tied to a harmful action. In low-conflict dilemmas, the harm is impersonal in nature and can be interpreted as a side-effect (e.g., hitting a switch that diverts the direction of the run-away trolley). In high-conflict (sacrificial) dilemmas, the harm is direct and performed in close proximity to the victim (e.g., pushing a stranger off the bridge). Imagining a harmful consequence induces empathetic arousal, which in turn leads to rejecting the utilitarian choice of action.

The dual process theory of moral judgment explains why most people reject the utilitarian option in emotionally charging, high-conflict dilemmas. According to the theory, two thinking processes are involved in the dilemma task: system 1 and system 2. System 1 is an automatic, affect-based process, similar to heuristics. System 2 is a conscious, elaborative process, requiring cognitive resources. The theory predicts that system 1 comes first and system 2 later. A quick, emotional reaction to the dilemma (system 1) leads to a non-utilitarian judgment (i.e., not endorsing harm for the utilitarian end). The respondent overturns the initial judgment to arrive at a utilitarian judgment by engaging in elaborative thinking (system 2). In the moral dilemma task, empathy is part of system 1 that leads to non-utilitarian judgments.

Past studies have found that low empathy is a robust predictor of utilitarian bias. However, several questions remain. One question concerns the nature of empathy that leads to non-utilitarian judgments. Past studies on empathy and utilitarian judgment in sacrificial dilemmas have produced inconsistent results. Some have argued that empathic concern (EC), genuine concern for

unfortunate others, predicts the preference. In contrast, others have contended that personal distress (PD), self-oriented sadness, is the predictor. How do the two types of empathy affect utilitarian judgments?

To answer the question, one needs to keep in mind that empathy is context-bound. In many contexts, dispositional empathy has little effects on how empathic the individual behaves. Empathy is fleeting, as it is susceptible to the context. In particular, the scope of empathy is limited, as people only empathize with a particular group of people. Without conscious effort, the empathic focus is fixed on some people, while the others receive no attention. In sacrificial dilemmas, there is a potential victim and several others who would be benefitted from the utilitarian judgment. Considering that a utilitarian judgment differentially affects the fate of two parties, there should be a tension as to whom to empathize. Since the utilitarian action involves harming a victim, empathy (EC and PD) for the victim, but not the saved, should be related to endorsing harm for a utilitarian end.

Chapter 2 examines the association between two types of empathy and utilitarian judgment in two categories of sacrificial dilemmas: other-beneficial (*footbridge*) and self-beneficial (*raftboat*). In the other-beneficial dilemma, the respondent is not implicated in the dilemma. He or she happens to witness the life-or-death situation and is asked to make a difficult decision. In contrast, the respondent is one of the several people who would be benefitted from the harmful action.

The results showed that both EC and PD for the victim were associated with utilitarian judgment. The two types of lower empathy for the victim increased the likelihood of (non-)utilitarian judgment. An interesting finding was that the effect of empathy depended on the context. When the dilemma context involved self-interest, higher empathy scores were associated with utilitarian judgments. However, a different pattern emerged for judgment in the other-beneficial dilemma. When the context was low in self-relevance, lower empathy predicted utilitarian judgments. These suggest that empathy predicts utilitarian bias regardless of the type, but the context matters. It appears that respondents are more empathetically engaged in the self-beneficial dilemma because they are one of the passengers in the emergency situation.

Chapter 3 manipulates empathy and shows that empathy for the victim is associated with (non-)utilitarian judgment. We used the same pair of dilemma scenarios (*footbridge, raftboat*), Empathy for the victim was induced by a standard procedure, which instructs the participant to take the perspective of the target person. To reduce empathy, we used one novel method, attributing a social identity to the victim that people abhor.

The results indicated that participants in the high empathy condition displayed higher empathy for the victim in the footbridge dilemma and less likely to make a utilitarian judgment. Supporting the hypothesis that empathic concern for those in sacrificial dilemmas is unequally distributed, empathy for the victim and the saved differed. In the high empathy condition, participants expressed significantly more empathy for the victim than for the saved. In contrast, participants in the low condition expressed significantly lower empathy for the victim and for the saved. In line with the central assumption of this thesis, participants emphasized with either the victim or the saved, suggesting that empathic focus is limited.

Chapter 2 and 3 show that lower empathy for the victim leads to utilitarian judgment. However, another question remains. Past studies have found that empathic deficit characterizes several personality profiles and physiological conditions, but only psychopathy predicts utilitarian bias consistently. It could be that reduced empathy interacts with other variables to make the individual callous to harming another for the utilitarian end.

Chapter 4 examines how reduced empathy is associated with utilitarian bias among those with high psychopathy by testing a hypothesis that emotional dysfunction interacts with psychopathic traits to predict utilitarian bias. In doing so, we explored the relationship between psychopathic traits, alexithymia (the inability to identify and describe one's feelings), low empathy, and utilitarian judgments in sacrificial dilemmas.

The results showed that difficulty in identifying feelings (DIF; one of the alexithymia traits) partially mediated the link between psychopathy and utilitarian judgment. When all the observed variables were entered into the model, DIF, low EC, and primary psychopathy significantly contributed to predicting utilitarian judgments. The current study suggests that lack of insights into own inner states, together with reduced empathy, dampens the sensitivity to interpersonal harm. The sacrificial dilemma does not entail discomfort if the individual lacks awareness of own emotional states.

Chapter 5 corroborates findings of Chapter 4 by examining the intersection between empathetic deficit and justifications for the utilitarian means. Until now, studies on moral judgment have focused on the emotional process, and the role of reasoning remains less clear. To better understand the relationship between reduced empathy, psychopathy, and utilitarian judgments, we asked participants to justify utilitarian judgments by using five justification variables: 1) deontology, 2) moral relativity, 3) emotional reactivity, 4) egoistic concern, and 5) confidence. They also reported empathy for the victim and the saved.

The results indicated that psychopathic people were more likely to report that the thought of performing the harm to another does not elicit emotional distress. The justification based on empathetic deactivation fully mediated the link between psychopathy and utilitarian bias. In line with the central assumption of this thesis, empathy for the victim and the saved, but not dispositional empathy, predicted utilitarian judgments.

Overall, four studies presented in this thesis show how empathy affects one's judgment about whether a harmful action for the utilitarian end is permissible. Specifically, the effect is specific to the context, whether one is implicated in the dilemma or not (Chapter 2). Manipulating empathy for the victim affects one's decision to harm that person (Chapter 3). Empathic deficit and its comorbid condition, difficulty in identifying feelings, together affect utilitarian judgments (Chapter 4). When asked to justify utilitarian judgments, people with low empathy report a diminished empathic arousal in sacrificial dilemmas (Chapter 5). Empathy for the victim sensitizes the individual to the harm, which in turn elicits aversion to the utilitarian solution. Overall, the current research suggests that empathy is part of the mechanism through which people experience an aversion to harm and that may constitute one facet of moral judgment.