

The Relationship Between Empathy and Moral Judgement in Typical and Clinical Populations

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Abstract. As a critical role in moral psychology, empathy and moral judgment have been studied by many psychologists and have promoted people's cognition and understanding of morality. Although there have been a lot of experiments that explored empathy and moral judgment separately, the relationship between the two has been neglected. It is not known how empathy and moral judgment interact. This review explored moral judgment and empathy's relationship in typical and clinical populations. This review can provide an in-depth exploration of the study of existing experimental results and research, and an analysis of the relationship between the two. The study of the relationship between empathy and moral judgment can deepen the field of psychological understanding of the process of making moral judgments. According to the review of existing studies, it was found that empathy can affect people's moral judgment in both typical and clinical populations along with age, sex, and different scenarios.

Keywords: Empathy, Moral Judgement, Psychology, Moral Psychology.

1. Introduction

The field of psychology's exploration of morality has focused on addressing questions about power, justice, welfare, and how people should treat others [1]. Moral judgment can further be defined as people's judgments about what is right and what is wrong [1]. People make a variety of moral judgments in their private and social lives. Some inappropriate and socially unacceptable moral judgments can have harmful consequences, while some appropriate and socially acceptable moral judgments can contribute to the success of individuals and the normal functioning of society. Therefore, moral judgments are important to the proper functioning of individual lives and society. Some scholars argue that reasoning is more important than emotion in moral judgment, while others believe that in moral judgment, the emotion, including empathy is transcendent to reasoning [2]. Empathy can be defined as the ability of people to think and feel about the inner world of others [3]. This review explored the role that empathy plays in moral judgment in typical and clinical populations. This review can deepen the field of psychology's understanding of how people make moral judgments. This study can also contribute to the development of educational programs on empathy and moral judgment for certain populations in specific sociocultural contexts, thereby promoting more pro-social moral judgment.

In the theoretical study of empathy, the psychologists analyzed the four themes found in most of the conceptualization of empathy. The four themes are understanding, sharing, feeling, and self-other differentiation [3]. With regard to the concept of understanding, the main focus is on the cognitive which involves knowing other people's emotional states and mental life. Leiberg and Anders proposed that empathy is an ability of human to perceive, understand, and respond appropriately to the emotions of others [3]. The theme of sharing is to experience the same emotional state as the other person and to share the feelings of other people. Chismar proposed that empathy means responding to the perceived emotional state of another by experiencing emotions of a similar nature [3]. The idea of feeling includes emotional responses appropriate to other people's situations. According to Liencres, Shamay-Tsoory, and Brune, empathy enables individuals to share the emotional states of

others. De Waal and Preston, define empathy as mental and emotional sensitivity to the state of others, as well as being able to share that state, be affected by it, assess its reasons, and adopt the other person's perspective. The concept of self-other differentiation involves the awareness of the difference between oneself and the other person. Coplan argues that empathy is a complex and imaginative process by which an observer simulates the mental state of another person while maintaining a clear distinction between oneself and another [3].

In the theoretical study of moral judgment, the controversy currently exists over whether rationality or emotion is primary and how rationality and emotion guide human's moral judgment. Kohlberg, a rationalist, believes that conscious moral reasoning is the dominant factor in moral judgment, while emotions are secondary [2]. However, more contemporary research confirms that emotions, such as empathy and disgust, have a significant impact on people's moral judgment. The emotion-based theory proposed by Haidt holds that people's unconscious intuition first constructs a moral judgment, and the reasoning process acts as a post hoc, providing an explanation or modification for the moral judgment constructed by intuition. In exploring the role of reasoning and emotion in moral judgment, Greene et al. proposed the dual-process theory, suggesting that there are two systems in the human brain that guide moral judgment. One guides reasoning, and the other focuses on the intuition-based process. The system that guides the intuition-based process is faster than the other. Therefore, the dual-process theory confirms that emotion is more dominant than reasoning in moral judgment. Mikhail's moral grammar theory suggests that individuals possess a moral grammar that contains unconscious knowledge of moral acts and rules, and that the moral grammar guides people in making moral judgments [2]. The theory of moral heuristics suggests that people are consciously or unconsciously guided by heuristics to make moral judgments [2]. Generally, the prevailing theories of moral judgment recognize the importance of emotions, but how emotions play a role in moral judgment remains controversial.

Empathy is defined in four topics, understanding, sharing, feeling, and self-other differentiation. These four topics can cover most of the current definitions of empathy. In the research of moral judgment, although there is a dispute about whether rationality and emotion are dominant or not, most psychologists acknowledge the importance of emotion in moral judgment, and emotion is more dominant than reasoning. While there has been a lot of research about empathy and moral judgment respectively, there has been relatively little research on the relationship between them, for example, whether empathy is a necessary quality for moral judgment, and how empathy affects one's moral judgment. Therefore, this review summarized existing studies on the relationship between empathy and moral judgment to facilitate an understanding of their relationship. This review discussed their relationship at the following levels: the effect of empathy and relevant factors on moral judgment and the effect of empathy on moral judgment in clinical populations.

2. The effect of empathy and relevant factors on moral judgement

2.1. Empathy and empathy-related factors

When people are faced with moral choices, they are influenced not only by empathy, but also by a variety of factors that have a decisive influence on their final decision. For example, in the trolley problem, whether people themselves are in a situation of direct influence, this factor is very important. The non-direct effect scenario here can be understood as a person simply pulling the trolley button to change the direction of the trolley. Nasello et al. examined moral decision-making by creating two trolley-like problems [4]. They also explore how gender, age, and empathy affected people's choices. Scenario 1 of the trolley-like problem is the scenario that has no impact directly on the participants. Scenario 2 is the scenario that has a direct impact on the participants. Participants from the University of Liège (Belgium) (N=255) provided age (assessed by self-report), gender (assessed by self-report), empathy (assessed by the scale), and social dilemmas (assessed by the trolley problems). Juliana. Nasello et al. found that people make more group-oriented choices in scenario 1 which is the scenario that has no impact directly on the participants, than in scenario 2 which is the scenario that has a

direct impact on the participants [4]. They also found that affective empathy produced different predictive effects according to gender in the two scenarios, the likelihood of making an individual-oriented choice (stopping the trolley) increases with the role of male empathy. They suggest that emotional empathy is a significant predictor of utilitarianism moral decision-making. The study showed that people in no-direct-impact scenario would make a choice that would benefit most people, namely, changing the direction of the trolley and killing one person to save five. People don't do that in situations where there is a direct impact, and obviously this factor is very important to people's decisions.

Since empathy is more of an emotional ability than a rational analysis, the level of Blood alcohol concentration can affect people's rationale. Blood alcohol concentration is also an important factor in moral decisions. Duke and Bègue explored the relationship between the acute effects of alcohol and making the utilitarian decision in trolley problems by doing two studies [5]. For the first study (switch dilemma), participants from a bar in Grenoble, France (N=60) responded to the trolley problem (assessed by questionnaire), and blood alcohol concentration (assessed by a breathalyzer). For the second study (footbridge dilemma), participants from a different bar in Grenoble, France (N=42) responded to the trolley problem (assessed by questionnaire), and blood alcohol concentration (assessed by a breathalyzer). Aaron A. Duke and Laurent Bègue found that in the first study, people made more utilitarian decisions [5]. Blood alcohol concentration has a positive relationship with making the utilitarian decision in the second study but not the first study. Both studies found a significant relationship between blood alcohol concentration and the endorsement of a person to let one person die in order to save five other people. The study reveals that blood alcohol concentration increases the likelihood that people will make utilitarian decisions. They are willing to let one person die in order to save five after drinking.

People can also try to increase people's moral behavior according to the factors that influence the moral decision. Because there are some factors that have a positive effect on people's moral decisions, people should also be able to make morally more favorable decisions when they have a positive effect on those factors. Nasirian et al. did a cross-sectional-correlation study [6]. The participants are nurses (N=200) who worked in the hospitals in Varamin and Khordad. Participants were selected by stratified random sampling. They provided data on empathy of emotional and cognitive, quality of life, moral metacognition, and moral behavior. The data are assessed by multiple questionnaires. Faezeh Nasirian et al. found a positive correlation between emotional and cognitive empathy and participants' moral behavior, and the correlation was significant [6]. Empathy motivates moral behavior in interpersonal situations by making people sensitive to others' needs and situations. Also, both emotional and cognitive empathy increases moral behavior. On the other hand, there is a significant and positive relationship between the quality of life and the moral metacognition, and the moral behavior of participants as well. These findings suggest that to improve one's the moral behavior, the moral metacognition, cognitive and emotional cognitive empathy, and quality of life should be improved as well. In this case, when nurses make moral judgments, there are several factors including empathy and others factors that will lead them to make the decision. So it will be helpful if the other factors can be affected positively.

When people engage in moral judgment, their empathy leads them to envision the anticipated emotions (such as the anticipated shame and guilt) that will follow a certain behavior. Therefore, the anticipated emotions serve as the intermediary that guides people's moral judgment. Anticipated emotions can be defined as the emotions that people anticipate when they assume that they will behave in a certain way. For example, if individuals tend to do behavior A in a moral dilemma, then they may feel anticipated guild and shame when they envision themselves doing behavior B. De Buck and Pauwels' study explored the relationship between empathy, uncooperative act and anticipated moral emotions [7]. They conducted a web-based survey of more than three thousand people between the ages of 12 and 25 in the Flanders region of Belgium. In this survey, researchers asked participants to imagine being in a particular scenario and to envision whether they would conduct the act of theft by finding (finding a lost item but refusing to return it) in this scenario. The researchers recorded their

probability of conducting theft by finding. In addition, participants were asked to imagine whether they would feel shame and guilt if they conducted theft by finding to assess their anticipated shame and guilt. The researchers also assessed the level of empathy of each participant. After quantitative analysis of the data, researchers found that empathy was positively correlated with anticipated guilt-shame, which was negatively correlated with theft by finding. This study shows that when people make a moral judgment, higher empathy causes them to feel, when performing what they perceive to be immoral, more intense anticipated guilt and shame. In turn, to avoid these unpleasant anticipated emotions, they avoid doing their perceived unethical behavior. Therefore, the anticipated emotions play a mediator role in empathy and moral judgment.

2.2. The impact of age and sex differences

Gender plays a role in moral decisions because men and women have natural differences that allow them to make different choices in making moral decisions. At the meantime, age plays a role in moral decisions as well. The older people get, the more they experience, so they may have different choices when thinking about the same problem. Rosen et al. suggested that the percentage of considerate decisions in everyday moral conflict situations is positively correlated with female gender and advanced age [8]. The mediating role of age and gender on moral decision making is emotional empathy. 197 participants from the University of Vechta (employees, students, and their friends and relatives) provided intelligence (assessed by the Mehrfach Wortschatz Test-B), emotional empathy (assessed by the Interpersonal Reactivity Index), emotional sensitivity and emotional concern (assessed by scale), reasoning abilities (assessed by "Leistungsprüfsystem-4), cognitive flexibility (assessed by the Modified Card Sorting Test), theory of mind (assessed by scale). They also completed the moral decision-making task. Jan B. Rosen et al. found that age is significantly associated with daily moral decision making and that considerate moral decision making was positively associated with age as well as gender [8]. These findings suggest that altruistic decisions increase with age and that women are more likely to make altruistic moral decisions.

3. The effect of empathy on moral judgement in clinical populations

Some people with psychopathy traits and alexithymia may have lower empathy and thus be more inclined to make utilitarian moral judgments in the trolley problem. Psychopathy traits can be divided into two categories, primary psychopathy traits (interpersonal-affective traits), and secondary psychopathy traits (antisocial deviance traits) [9]. Alexithymia is characterized by three features, which are difficulty in identifying feelings, difficulty in describing feelings and thinking dominated by external stimuli [9]. A typical sacrificial dilemma is that pushing a stranger into a speeding train can save a large number of people (the trolley problem), while the choice to actively sacrifice a stranger is a utilitarian moral judgement. Takamatsu and Takai conducted a survey of nearly 300 university students from Japan to assess their primary and secondary psychopathy traits, alexithymia, empathic concern and likelihood of making utilitarian moral judgments in the trolley problem [9]. The results showed that both types of psychopathy traits and alexithymia caused a decrease in empathic concern. Difficulty in identifying feelings and primary psychopathy traits were positively correlated with utilitarian judgments, but the other two alexithymia traits and secondary psychopathy traits were not correlated with utilitarian judgments. In the trolley problem, people with interpersonal-affective traits and difficulty identifying feelings may have difficulty feeling the remorse of a person being sacrificed. They may also have difficulty empathizing with that person. Therefore, the psychopathy traits and alexithymia can reduce people's empathy and lead them more inclined to make utilitarian moral judgments.

Theory of Mind (ToM) deficits in children with autism may limit the role of emotions such as empathy in making moral judgments, thereby allowing autistic children to make atypical moral judgments. ToM refers to the ability to attribute mental states to others, and many individuals with autism have ToM deficits [10]. Ringshaw et al.'s study explored the relationship between Theory of

Mind (ToM) and moral decision-making in children with autism [10]. Ringshaw et al. conducted an experiment with 38 children with autism between the ages of 6 and 12, while 38 neurotypical boys formed a control group that also completed the experiment [10]. In the experiment, both the control and experimental groups were asked to allocate resources to imaginary receivers with different merit, health and wealth. The results showed that the autistic children tended to distribute the resources equally, while the neurotypical boys tended to allocate more resources to those who were more morally deserving. Ringshaw et al. suggested that ToM deficits may be responsible for the atypical judgments made by autistic children because it limits the combination of affective empathy and moral information [10]. More specifically, when autistic children make moral judgments, they are not able to use their empathy or other emotions to guide their judgments. Therefore, autistic children may make atypical moral judgments in some cases.

For people with autism, the interaction of high alexithymic traits, low empathy, and the personal pressure they face when required to make judgments in the presumed moral dilemma make their probability of making utilitarian moral judgments comparable to that of individuals without autism. Individuals with autism often have emotional and social cognitive impairments. In particular, the prevalence of clinical levels of alexithymia in the non-autistic population is 10%, but this figure is 40-65% in people with autism [11]. Accompanying alexithymia is the presence of emotional processing deficits such as low empathy. Patil et al. made an experiment and questionnaire with 17 high-functioning autistic adults to explore how autistic people make moral judgments in moral dilemmas [11]. There was also a control group. The results showed that despite the emotional and social cognitive impairments of individuals with autism, the probability they made non-utilitarian or utilitarian moral judgments was comparable to the control group. That is, people with autism are not more inclined to utilitarian moral judgments compared to those who do not have autism. The researchers offered an explanation for this. First, people with autism experience negative emotions such as nervousness when asked to make a judgment in response to a presumed moral dilemma. This trait causes them to experience reduced utilitarian bias. Second, the alexithymic traits of autistic individuals, accompanied by reduced empathy, can bring about elevated utilitarian bias. Because these two opposing mechanisms are present in autistic individuals simultaneously, the likelihood of making utilitarian judgments when faced with moral dilemmas is similar for autistic and non-autistic individuals.

4. Conclusions

In the typical population, empathy is an important factor that influences people's moral judgment. Empathy allows people to feel the needs and emotions of others, and thus they are more likely to make moral judgments that are in line with social norms. For example, in the trolley problem, people with high empathy are not inclined to make the utilitarian moral judgment. However, after drinking alcohol, people are more likely to make the utilitarian judgment. In addition, age and gender also influence people's moral judgment. Some clinical populations may make different moral judgments in moral decision making than healthy individuals because of their mental health disorders. Takamatsu and Takai's study found that some psychopathy traits and alexithymia cause people to make more utilitarian moral judgments in the trolley problem. A possible explanation is that the psychopathy traits and alexithymia are accompanied by reduced empathy. Reduced empathy makes it difficult for people to empathize emotionally with people who are hurt in the trolley problem and thus make utilitarian judgments. Reduced empathy is also a characteristic of individuals with autism, and this characteristic causes individuals with autism to make atypical moral judgments in certain situations. However, in the trolley problem, the frequency of making utilitarian moral judgments is comparable between autistic and non-autistic individuals. In this case, negative emotions, such as stress, that occur in social situations in autistic individuals play an important role in balancing their utilitarian bias.

The review of existing studies finds that in confirming the important role of empathy in moral judgment, most studies are devoted to finding a correlational relationship between the two factors. However, correlation does not always imply causality, and confirmation of causality can more accurately demonstrate the role of empathy in moral judgment. Future research should investigate the causal relationship between empathy and moral judgments, such as utilitarian moral judgment. In addition, there are some recent studies on the moral judgment in clinical populations, such as those with autism and alexithymia, but these studies have been limited to understanding the characteristics of these clinical populations. One idea is whether research on the moral decision-making process in clinical population can help deepen the interpretation of the moral judgment in typical population. Interpreting the role of empathy in moral decision-making in the typical population and the clinical population in conjunction with each other could be a future research direction.

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