The Effects of Cognitive and Affective Empathy on Moral Decision-Making

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Abstract. This retrospective paper's goal is to review the research that has been done on how empathy affects moral decision-making and choices. Two major aspects are reviewed, namely the relationship between empathy and morality. Other relevant factors that work together with empathy to affect people's moral decisions were also examined. This review primarily summarized the most updated research studies that examined how moral judgments are affected by cognitive and affective empathy in both non-clinical and clinical populations. Finally, it is concluded that empathy is a basic and important ability for people to make moral decisions, but there are many factors, such as attachment. Attachment and emotional factors can play an essential role in people's moral decisions. Limitations of previous study were also discussed and analyzed. Future directions of research were explored as well. This review can provide some suggestions for the development of prevention and intervention courses for morality and prosocial behavior.

Keywords: Empathy, morality, moral decision-making, cognitive empathy, affective empathy.

1. Introduction

A proper theory of moral life consists of two parts. First, a sense of morality is a gift people are born with. Natural selection has, to some extent, evolved infants' inherent morality, enabling them to assess the behaviors of others, feel empathy and compassion, and even have a basic grasp of justice and fairness. This allows humans to behave in ways that maximize their own interests and those of society as a whole and contributes to the survival of the group through evolution. However, individuals are more than just babies, more than just possessing simple innate morals. The outcomes of people's empathy, their creativity, and their enormous capacity for reason have become a crucial component of their morality not only in human history but also in the process of personal growth. These acquired factors and people's innate sense of morality work together to shape their moral behavior and decision-making [1].

Empathy is a major theme in many subfields of psychology as well as other sciences and has been recognized in past research as playing a key role in human well-being [2]. The drawback, however, is that the conceptual and operational definitions of empathy in the current field of research are currently still very inconsistent. Empathy in the current scientific field includes - Cognitive Empathy, Emotional Empathy, Moral Decision Making/Ethical Decision-Making Ability [3]. Moral decision-making is the ability of a decision maker to decide to behave in a morally right way. Research on the role of empathy in the area of ethical decision making can advance by examining the influence of empathy on moral/ethical decision making. Studying this topic has profound implications for the psychology profession, as well as for other disciplines (neurology, etc.). Not only can it improve scientific research or refine theories for the population under study, but it can even have a great impact on the social life that is so close to people's hearts. There are several important studies that are developing conclusions and findings about morality and decision-making abilities and, to some extent, supporting ethical decision-making research. Rest's four-component framework of personal ethical decision making is one of the more well-known theories. This theory categorizes moral decision-making into four models: identifying a moral issue, rendering a moral judgment, deciding to prioritize the issue over other issues, and finally acting on the issue. Rest argues that ethical decision-making is finally compressed into four steps - awareness, judgment, intention, and action. There is another theory based on Rest proposed that the ethical decision-making process has some influence on moral

intensity [1-3]. Six components are present: the magnitude of consequences, social consensus, likelihood of impact, temporal immediacy, proximity, and concentration of effects. Some previous studies have suggested that moral intensity includes the perceived importance of ethical issues that affect behavioral intentions. In addition to this, there are many other once studies that have also argued that ethical decision-making ability is related to personal factors. However, although many research areas are trying to study and develop empathy and reasoning/ethical decision-making ability, their own operational definitions as well as explanations of how empathy affects ethical decision-making in terms of morality have been neglected in this field. Therefore, the review will present and synthesize research on the impact of empathy on decision-making and provide a discussion on empathy and ethical decision-making skills.

2. The Association between Empathy and Morality

2.1. The Relationship between Empathy and Morality in Non-Clinical Population

Empathy is considered a key ability in moral cognition and cognitive processes and is one of the foundations of ethical behavior. Moral cognition includes moral sensitivity and moral judgment. Moral personality refers to taking moral goals as one's own goals and associating them with personality traits such as agreeableness and conscientiousness. The study defines moral competence as the conscious decisions and actions taken in every situation of responsibility. Based on Schwartz's theory of human value and the five-factor model of personality, the direction of moral identity is based on personal value and personality in this study and attempts to clarify how moral personality is formed. The researchers looked at two key components - moral cognition and moral cognitive processes. A number of German undergraduate students made up the main sample for this study, which was considered a convenient sample, and explored the entire dimension of empathy. Specifically, five-factor models of empathy, personal values, moral cognitive processes, moral state processes, and personality were measured by questionnaires. Finally, the study found that empathy, especially ethical competence, explains individual differences in moral cognition and moral identification. For personal values, the study found that moral orientations seeking universal respect for the fairness and weal of other people and humility guided the development of higher standards of moral cognition and moral identity systems. In addition, the wide range of personality differences also explains the differences in moral capacity in the process of moral identification. Therefore, empathy is the key moral ability that has personal diversity in moral cognition and the process of moral cognition [4].

Empathy is thought to influence an individual's predictive ability in terms of other-oriented thoughts and behaviors, including prosocial moral withdrawal and moral disengagement. Prosocial moral reasoning (PMR) is considered to be one of the factors that influence prosocial and moral behavior [5]. It mainly considers the difference in benefits between helpers who are likely to provide assistance to those in need and those who are assisted, deciding whether to act altruistically with little or no external rules. Moral disengagement (MD) is similar to cognitive distortion and aims to prevent people from condemning their own unethical behavior when they recognize it. This cognitive distortion helps them not to blame themselves easily under the supervision of their own personal values and social norms of behavior. The study looked at how people respond to a clear request for aid by either offering or refusing to give assistance while taking into account emotional and cognitive aspects. Using the theoretical framework outlined by Batson, this study examines the maintenance of the moral cognitive process of an individual's emotional response to discomfort in others. This study used a sample of Italian youths to evaluate whether empathy and personal sustaining affect PMR and MD to encourage or restrict helping action when necessary to respond to a help request that is not in the person's best interests. Youthhood is a critical time for gaining moral experience and expertise, laying a foundation for moral character, identity, and agency in later adulthood. In addition, the study highlights the importance of moral disengagement in avoiding moral responsibility to those in need. The results suggest that when individual costs are high, prosocial decision-making differences may

be manifested as affective tendencies and moral cognitive processes. First, when a person's level of empathy is high, that person's altruistic response is more likely to be elevated, leading to mature prosocial moral reasoning. Second, some self-centered behaviors may stem from personal distress, which reinforces the mechanism of moral disengagement. Thus, empathy has been proved to play a vital role in an individual's moral perception and moral decision-making.

Emotional and cognitive functions are involved in moral decision making, such as affective empathy, cognitive empathy, or Theory of Mind (ToM). These functions are thought to be influenced by changes in era and gender differences [6, 7]. Emotional empathy allows individuals to develop spontaneous emotional responses to the experiences of others, and through this, regulate their moral decisions. ToM is sometimes defined as the ability to recognize other people's mental states when individual is aware of one's own mental state is independent, and to assign those states to others. These states include beliefs, desires, opinions, and intentions [8]. On the other side, ToM or cognitive empathy is thought to facilitate egoistic decision-making in situations of moral conflict in everyday life, consequently affecting how moral judgments are made. This study's objective was to investigate how neuropsychological functions associated with age and sex differences affect changes in moral decision-making (altruistic moral metrics). Structural equation models (SEM) were used to test whether age and gender signed altruistic moral decisions. Neuropsychological tests were used to measure intelligence, emotional empathy, executive reasoning (cognitive flexibility and planning), and cognitive empathy, while moral decision-making tasks were included to measure the percentage of altruistic decisions. In this study, female and male contributors did not present any differences in neuropsychological test scores, with men with medium effect sizes showing better cognitive flexibility and women with large effect sizes display a higher level of emotional empathy. This suggests that women are somehow more likely to make altruistic moral decisions. Beyond this, reasoning problems are not affected by age and gender's consequential effects on moral decision-making. In the positive correlation between altruistic behavior and age and gender, affective empathy is confirmed as the mediating hypothesis. Therefore, it suggests that age-related and gender-related moral decisions are mediated by emotional empathy.

Through the influence of empathy, people's moral judgment and moral behavior may be affected. In previous research investigations, it has been found that alcoholism may affect social and cognitive functioning [7]. The study also found that alcohol may impair emotional resonance, leading to an increase in utilitarian responses. The aim of the study was to uncover the keen influences of alcohol on emotional empathy and moral judgment. In the meantime, the physiological reaction of moral behavior and moral dilemma after drinking in virtual reality is discussed. Participants used a hybrid model design in the study to detect differences between low-alcohol individuals by repeatedly measuring behavioral and moral responses to emotional resonance, as well as heart rate responses to virtual reality and text-based moral dilemmas. The study found that behavior in virtual reality exhibited a greater utilitarian response than moral dilemmas in text. In addition, drinking in virtual moral dilemmas only changed the heart rate response and self-reported performance of virtual reality behavior, without affecting the drinker's moral behavior and moral judgment. Although alcohol impairs emotional resonance, it does not have an impact on utilitarian decision making. This could mean that there are other aspects that affect the relationship between drinking and utilitarian judgments. Therefore, this research proves that the impairment of emotional empathy does not change an individual's moral decision-making, which may be due to the fact that moral behavior is dominated by utilitarian responses.

2.2. The Impact of Empathy on Moral Decision-Making in Clinical Population

Some clinical populations, such as those with autism spectrum disorder (ASD), exhibit empathy deficits. In this situation, individuals with ASD might have a moral impairment [8]. ToM is crucial for moral decision-making. This is so because it activates the integrated empathetic pathway and involves higher moral feelings. Numerous neuroimaging research has shown that ToM is connected to moral judgment, although behavioral investigations are also required. Because ToM is deficient in

ASD, ASD is thought to have atypical moral decision-making. To claim the role of ToM or cognitive empathy, in the allocation of third-party resources, children with ASD and neurotypical children were contradistinguished in moral decision-making. A cross-sectional relationship project was applied in the study. The neurotic and ASD groups were both consisted of the same number of children from schools in low-and-middle income communities. The study found that, overall, both groups showed a preference for fairness. However, in the task of resource allocation by a third party, neurotypical children tend to allocate more resources to morally worthy recipients. This may indicate that children with ASD are more inclined toward equal distribution, while neurotypical children are more likely to interpret fairness in the presence of characteristics with group differences. It is possible that this may be due to cognitive empathy deficits that limit atypical moral decision-making in ASD, as the results suggest. The findings imply that this might be caused by cognitive empathy deficiencies that prevent persons with ASD from making unusual moral decisions. As a result, it has been established that atypical moral decision-making is linked to ToM (cognitive empathy), and that moral judgment will be greatly impacted when ToM is weak in its capacity to integrate empathy.

There is a lot of evidence that psychopaths have deficits in emotional empathy. This dysfunction, contrary to the typical symptoms of ASD, involves difficulty in understanding the actions of others, but can respond to the pain of others [9]. The main motivation of this research was to study whether psychopathy is in combination with a relative lack of awareness of harm to victims and a lack of concern for the commonable good in moral decision-making. Then, given the reduced ability of inmates to absorb sophisticated emotional expressions, the study also aimed to determine whether psychopathic inmates also fit this profile. Study participants were male, divided into groups of students and prisoners, and assessed for psychosis on the Psychiatry Revised Form (PCL-R). Process separation is used to analyze moral tendencies, namely the inclination to avoid harm (AH) and the inclination to maximize consequences (MC). The results showed that prisoners with high standards of psychosis were less possibly to avoid harm in moral dilemmas and less likely to perceive harm in their own particular behavior. The study also found that inmates with psychopathic traits, like other prisoners, lack the capacity to identify mixed emotions on account of facial expressions. Nevertheless, the tendency to maximize outcomes in moral decisions did not differ significantly between the two groups. Finally, this study found that characteristic factors of psychosis may include affective empathy dysfunction, in the absence of awareness of these disorders. Mental illness has more to do with people being more receptive to harm than with differences in benefit analysis. These emotional empathy disorders can cause people with mental illness to make moral decisions and commit unethical impulsive errors.

3. Relevant Factors to Empathy and Morality

In addition, there may be related factors that affect people's empathy and morality, like attachment relationships [10]. Attachment theory describes attachment-related experiences between children and caregivers that influence their adult attachment styles, both safe and insecure. Secure attachment tends to trust and depend on others. On the contrary, there are insecure attachment types. When attachment experiences are insecure in childhood, these can translate into anxious attachment types in adulthood. These people tend to rely too much on close people. In addition to this, if the caregiver ignores the child's comfort needs, this can lead the child to believe that their dependence on others is futile and to transition into avoidant attachment styles in adulthood. These people are not comfortable forming close relationships with others. Some research suggests that attachment anxiety may represent greater utilitarianism in decision making. In fact, however, research on moral reasoning in the study of attachment relationships has hardly investigated the role of interpersonal experience in moral judgment. Therefore, the focus of this study will further explore the relationship between attachment and utilitarianism. By comparing the ways in which the two types of secure attachment affect moral judgment, it may be possible to clarify the extent to which interpersonal experience affects people's empathy and thus affects moral judgment. Through this research, it is also possible to distinguish

different utilitarianism in the secular field. The experiment assessed participants' highly divergent responses to moral dilemmas to reduce the ceiling effect. Participants completed a consequentiality scale to further measure the acceptance of utilitarian beliefs in a broad sense. The study observed that neuroticism was associated with both anxious attachment and avoidant attachment during a pre-test. In study 1, the experimental sample not only responded to the prediction rating of utilitarianism of the two types of attachment insecurity in the prediction test, but also found that individuals with anxious attachment paid more attention to the interests of the group, so as to make utilitarian choices. In other words, both types of attachment tend to favor group interests. Nevertheless, for people with anxious attachment, they are more concerned with belonging and group welfare. In contrast, avoidant attachment individuals have lower empathy for the discomfort of caring for others and sacrificing individuals. Study 2 followed up Study 1 by showing that both attachment types predicted utilitarianism, but through different associations. The final sample in study showed that the two attachment types chose group preferences differently. Anxious attachment selects group preferences, whereas avoidant attachment does the opposite.

In theory, neuropsychiatric disorders can also affect empathy and moral decision-making, such as some psychiatric disorders with less social interaction [11]. Korsakov syndrome (KS) is a neuropsychiatric disorder that has a tendency to isolate due to low social interaction. In this study, patients in moral dilemmas were evaluated using a self-evaluation method to assess their moral decision-making, moral reasoning, and empathy ability. Many patients diagnosed with KS were recruited and control group was formed with healthy participants who were matched for age, education, and gender. The study found that KS patients made the same moral decisions in moral dilemmas as healthy subjects, meaning that KS patients had no utilitarian bias and were found to have relatively intact empathy. However, the study also found that even when KS patients were able to comprehend the difference between correct and incorrect, they were not following the law. They are more concerned about whether the impact on themselves is positive or negative, which may mean that people with KS are less mature in their moral reasoning. Their moral reasoning is more derived from pre-traditional rod or reward-driven reasoning than from traditional legal-oriented reasoning. Therefore, the symptoms of KS people did not affect empathy, but there were still some problems in moral reasoning that led them to make unethical decisions and behaviors. Moral decisions have thus been shown not to be influenced by empathy alone.

4. Conclusion

It is clear that cognitive empathy and emotional empathy have different degrees of influence on moral decision-making. For non-clinical populations, research shows that, first, empathy is one of the fundamental abilities of moral cognition and moral decision-making. Secondly, empathy affects individuals' predictive abilities such as socially oriented thinking and behavior, altruistic moral withdrawal, and moral alienation. In addition, moral cognition includes moral sensitivity and moral judgment, while moral personality refers to seeing moral goals as one's own and associating them with personality traits. Finally, the study found that age and gender differences may influence moral decision-making. While alcohol may impair emotional resonance, it does not affect utilitarian decision making. In clinical populations, such as ASD, deficits in the ability to empathize can lead to moral deficits. ToM is essential for moral decision making because it activates the integrated empathy pathway and involves a higher sense of morality. While behavioral investigations are needed, many neuroimaging studies have shown that ToM is associated with moral judgments. Due to the deficiency of ToM in ASD, ASD is a disease of atypical moral decision-making. The study also found that children with autism tended to be equally distributed in third-party resource allocations, while neurotypical children were more likely to account for equity based on characteristics of group differences. These results suggest that this may be due to deficits in cognitive empathy that limit atypical moral decision-making in ASD. In addition, psychopaths have deficits in emotional empathy.

These psychopaths may cause problems when making moral decisions, even when cognitively functioning.

There are other factors that influence people's empathy and moral decision-making, such as interpersonal relationships. The attachment relationship is an important factor affecting the moral reasoning of interpersonal relationship. Although anxious attachment and avoidant attachment have the same output of moral judgment, they are different from the utilitarian association model. Avoidant attachment styles have lower empathy for others and tend to choose utilitarian choices to accomplish greater benefits. On the other hand, anxious attachment style is more concerned about group desire, so they choose to maximize the interests of the group. This suggests that people's moral decisions are influenced not only by empathy, but also by attachment styles. In addition, mentally ill people with low resilience, such as KS, also have problems making moral decisions, even though studies have shown that their empathy is not defective. This further theorizes that people's moral decisions are influenced by other factors besides empathy. Therefore, empathy is a crucial component of moral decision-making, but it is also influenced by other factors.

There has been a lot of research on the impact of empathy on morality. However, in fact, the conclusion of various studies on empathy may be hindered by the lack of a consistent definition of empathy. Moreover, the existing theoretical development of ethical decision making is not perfect, resulting in the existing research has not developed new tools to test different aspects of ethical decision making. In addition to this, there are existing studies that use self-reported data, which can lead to some methodological biases. Therefore, the direction of future research can continue to explore a scientifically consistent definition of empathy, which will help the research of empathy to reach more scientifically rigorous conclusions. In addition, it is necessary to explore other longitudinal studies on ethical decision-making, such as business management, moral intensity, demographic variables, cultural dimensions, and so on. This helps to further explore the impact of empathy on moral decision-making under objective measures.

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