

# Empathy and Criminal Motivation: Relationship and Prevention

Zixi Ma \*

Shanghai Pinghe Bilingual School, Shanghai, China

\* Corresponding Author Email: mazixi22@shphschool.com

**Abstract.** The study explores the relationship between empathy and criminal motivation, analyzing how empathy can be used to prevent crime. Empathy, as the ability to understand and share the emotional experiences of others, plays an essential role in revealing the motivations behind crime and developing prevention strategies. The core of this study is that empathic intervention can increase abusers' cognitive and emotional awareness of the harm of their aggression, and this awareness will offset the previous self-perceived rewards of sexual violence. Through literature review and case analysis, the study found a close link between empathy and criminal motivation. Offenders may experience setbacks in social relationships, emotional distress, or interpersonal conflict and lack positive emotional support. This lack of empathy may prompt them to seek the wrong ways to satisfy their needs, thus forming a criminal motive. An in-depth study of how empathy is applied in prevention strategies can provide new perspectives on crime understanding and intervention. Criminal behavior can be prevented by developing empathy, promoting positive social interactions, or providing emotional support. This comprehensive approach is vital for social construction and crime prevention.

**Keywords:** Criminal tendency; empathy; therapeutic method; crime prevention.

## 1. Introduction

As a complex social cognitive process, by creating emotional connections with others, empathy enables humans to have the ability to perceive, understand, and share the emotions of others. Thus, the development of empathy plays a vital role in morality, social interaction, and behavioral choice, providing the necessary foundation for individual moral awareness, cooperative behavior, and social adaptation. In recent years, studies focusing on crime tendencies have gradually improved with the increase of crime rates in many countries, including China, the United States, and other countries. References have emphasized the positive relationship between empathy and prosocial behavior. The stronger the ability to empathize, the more inclined individuals are to exhibit positive moral and cooperative behavior. As we delve deeper into empathy, researchers are beginning to focus on the positive and negative associations between empathy and criminal tendencies.

From the perspective of life, understanding the relationships between crime tendency and empathy is helpful for relevant institutions to formulate more effective prevention and coping strategies for crimes. An appropriate capacity for empathy helps guide patients to express their inner emotions and impulses effectively, reducing the possibility of emotional accumulation and impulsive crime. In contrast, a lack of empathy may lead to serious disorders and dysfunction in social interactions. In addition, empathy helps individuals develop positive social support networks that provide support and encouragement, reducing feelings of isolation and anxiety. Empathy is not limited to the perpetrator but also promotes the trial and education of the relevant professionals. In the trial of offenders, police and law enforcement officials actively listen to and understand the motives and background of offenders to reduce hostility and prejudice. Through respect-based communication, police are able to treat perpetrators more rationally in the course of law enforcement, thus helping to reduce tensions and the recurrence of violent acts.

Non-directive therapy, known as client-centered or humanistic therapy, is a vital psychotherapy approach proposed by psychologist Carl Ransom Rogers in the 20th century. With respect and understanding of the individual's inner experience as its core philosophy, this approach emphasizes an equal and supportive relationship between therapist and patient. In non-directive therapy, the therapist does not guide the patient in an expert or authoritative manner but communicates sincerely

and empathizes with the patient, working to create a safe and understanding therapeutic environment in which the patient can better achieve self-knowledge and personal growth. This treatment approach emphasizes the initiative and autonomy of the patient as the subject of the treatment process [1]. Empathy is one of the core elements of non-directive therapy. It provides a meaningful way to realize the therapeutic goal of being people-oriented and respecting individual values and needs. Through empathy, the therapist can build trust and cooperation with the perpetrator, thus laying the foundation for changing their cognition and behavior. By empathizing with the offender's life experiences and emotional experiences, the therapist is able to gain insight into the motivations and psychological mechanisms behind them. This understanding helps reveal the underlying causes that guide criminal intentions. In addition, the concept of empathy in humanistic psychotherapy is not only a tool in diagnosis and treatment but also plays a crucial role in crime prevention. Through a sensitive understanding of individual needs, therapists are capable of identifying potential risk factors and preventing potential criminal tendencies from developing into actual behavior. In addition, empathy also helps to foster social support systems that enable individuals to integrate into positive social networks, reducing their likelihood of adverse influences. Therefore, the entire society gradually develops under the reduction of the crime rate and the improvement of citizens' moral emotion cognition, building a more harmonious social environment.

This paper focuses on the interaction of empathy and criminal motivation, through the combination of existing theories to carry out relevant research and innovation. The empathic mechanism mentioned in this article refers to understanding the emotions of others, which exists between the therapist and the individual and between the individual and the outsiders. In addition, the extension under the social level aims at further attention to the individual. Provide highly targeted intervention measures to help individuals promote the positive development of social relations and personal well-being.

## 2. Method

The literature was mainly searched through the database of Google Scholar. Comprehensive results are obtained by screening articles that advance the topic. The author's search for literature mainly relies on searching for keywords with high relevance. The terms involved include, but are not limited to, empathy, criminal tendency, criminal mind, and psychological intervention. From a large number of studies, selected articles with high relevance to the topic of this study. At the same time, the number of citations and the writing time are taken into account, for which articles with minor citations and long writing time are excluded.

## 3. Literature Review

### 3.1. Definition and Theoretical Framework of Empathy

The development of empathy has undergone a transition from philosophical concepts to empirical research. The concept of empathy was first introduced in the 19th century by the German philosopher Friedrich Schleiermacher, who first articulated it explicitly in his book "Über die Pädagogik" ("Introduction to Pedagogy"). He supposed that there is a kind of psychic communication between humans that allows us to perceive the emotions and inner states of others. This resonance is not limited to individuals but also extends to humanity's connection with the natural world and even the universe as a whole. This idea of Friedrich Schleiermacher laid the theoretical basis for empathy in psychology and sociology. Through the research and advancement of many psychologists who focus on related fields, empathy integrates interdisciplinary research of psychology, neuroscience, and sociology. It gradually expands the related fields of human activities. The researchers posit empathy as a model formed by the interaction of four mechanisms, including, first, emotional sharing between self and others based on automatic perception-action coupling and the resulting shared representation. Second is self-awareness, which means gaining a clear understanding of oneself and others. Third, it is subject

to the subjective views of others. Last is the process of regulating subjective feelings related to emotions [2].

In past research, researchers have adopted various research methods to explore this topic, among which experimental and field investigation are the two relatively widely used methods. Experimental research methods allow researchers to test the causal relationship between empathy and criminal tendency through real crime scenario analysis, while field investigation can collect relevant data in natural environments to provide more realistic research results. However, due to the high resource and time requirements of experimental research and field investigation, researchers may have to face economic and practical constraints. Therefore, considering the feasibility of the study, the researcher chooses the form of a literature review to explore the connection between empathy and criminal tendency by combining different viewpoints, on this basis, innovating further.

### **3.2. Empathy as Emotional and Cognitive Abilities**

The empathy training mentioned in this article is mainly divided into three different targeted functional components: (1) Basic training for therapists, which requires them to empathize with the perpetrator and initiate treatment; (2) Empathy training for people with criminal intent, focus on cognitive empathy; (3) Target people whose empathy mechanisms have been compromised. Through the pathologic analysis of its physiological problems, avoiding unnecessary violence caused by emotional problems.

Empathy is an emotional and cognitive ability that differs from compassion. Empathy therapy does not require social workers to tolerate or even forgive the offender. However, what they need to do is to understand the offender. Gain a deeper understanding of why they might act the way they do while also learning about the offender's motivation, background, psychological state, and factors that may lead to problematic behavior. When social workers come into contact with offenders, they must set aside preconceived prejudices or stereotypes and try to think from the offender's perspective. The study that focuses on sex offenders, researchers Covell and Scalora suggest the widespread use of empathy training content in sex offender treatment programs [3]. Almost all treatment programs include empathy training as an integral part of a larger relapse prevention treatment model. Doctors try to integrate emotional, social, and cognitive constructs to understand the lack of empathy in sexual predators fully.

Cognitive empathy is an individual's ability to understand the thoughts, feelings, intentions, and emotions of others. It involves thinking and feeling from the perspective of others, as well as being able to infer and predict the actions and emotions of others. The individual empathic ability has a significant positive effect on emotion cognition and impulse control. The results show that the user's individual characteristics are related to VR immersion: the user's experience in VR depends on the individual characteristics, and the personal characteristics, in turn, affect the user's degree of immersion in VR [4]. Researchers can extend the VR environment as a social environment. Based on the results of this study, the author inferred that individuals' understanding of emotions strongly affects their cognition of other related things. Criminals who commit crimes due to a lack of empathy are usually in a situation in which they have incorrect control over their emotions. Therefore, training their emotions to a certain extent helps criminals correctly recognize their inner needs. Empathy can be viewed as a continuous variable factor or a multiple-risk model. The increased ability to empathize makes the individual more sensitive to the emotions expressed by others, which enables him to have a more apparent emotional cognition in the face of his feelings. This richness of affective cognition helps individuals to understand better, identify, and express their emotions, thus enhancing the ability of emotional regulation. For example, by investing themselves in the emotional experiences of others, individuals are able to pick up subtle emotional changes and expressions more accurately. Therefore, have richer emotional perceptions. In addition, it helps individuals better distinguish the differences between different emotions and understand their connections. This advantage provides individuals with more emotional choices and strategies, enabling them to choose more targeted emotional regulation strategies to better manage their emotions and avoid excessive reactions. It has been

pointed out that personality traits, personality perspective, or personality empathy concern contribute to the development of individuals' interpersonal relationships, and other empathic constructs are closely and positively associated with prosocial behaviors [5]. On the other hand, the reference suggests that a lack of empathy can lead to violent behavior [6]. For sex or violent offenders in different fields, the negative relationship between cognitive empathy and offensive behavior is more robust than emotional empathy [7]. The cognition of emotion is an indispensable part of suppressing the motive of crime.

### 3.3. Neurological Foundation of Empathy

In patients with impaired empathy, damage to mirror neurons in the brain leads to losing control over emotion management. The core mechanism of the mirror neuron system is that when an individual observes another person performing a particular behavior, the system activates in the observer's brain to simulate the same behavior. This mirror-like activation mechanism enables individuals to mimic and understand the actions, emotions, or intentions of others, thereby achieving emotional resonance and social interaction. The activity of the mirror neuron system provides a mechanism of emotional resonance for individuals. By experiencing the emotions of others in their own way, individuals can more deeply understand or infer the feelings of others and then establish emotional connections. This mechanism plays a vital role in social interaction, promoting the formation of emotional cognition or association and contributing to the establishment of interpersonal relationships as well. This medical discovery also led to the emergence of self-projection in psychotherapy [8]. Conversely, the absence of this mechanism can lead to problems in the individual's social performance, such as marginalization and indiscriminate violent aggression.

Experiments have shown that bilateral anterior insula (AI), rostral anterior cingulate cortex (ACC), cerebellum, and brain stem are activated when a person receives pain signals from others [9]. As a complex social cognitive ability, multiple brain regions must work together to achieve emotional resonance, understanding, and social interaction. The neural matrix of the experience of empathy involves only the parts of the pain network associated with an emotional quality that is associated with empathy. Brain network connectivity is the basis of information transfer between different brain regions, and it forms the complex network that supports cognitive and emotional processing. As a basis, emotional arousal involves the amygdala, hypothalamus, and orbitofrontal cortex (OFC). Then there is the understanding of arousal emotion, which relies on the medial prefrontal cortex (mPFC), ventromedial prefrontal cortex (vmPFC), and temporoparietal junction (TPJ) to work [10]. In simple terms, abnormal connectivity can lead to limited transmission of information across brain regions and even dysfunction in some connections. Emotional resonance and social cognition are the product of multiple brain regions requiring efficient information transfer and integration between different brain regions. When connectivity issues exist, individuals may experience challenges in accurately understanding the emotions, needs, and intentions of others. This connectivity problem also makes it difficult for individuals to synthesize complex emotional and social situations.

The authors propose a specific treatment that can help in response to this situation. The first is Neurofeedback Training (NFB). Neurofeedback is a type of biofeedback in which neural activity is measured and presented to participants in real time through one or more sensory channels. It is a method of monitoring and adjusting the brain activity of an individual [11]. In neurofeedback training, advanced brain imaging techniques such as functional magnetic resonance imaging (fMRI) or electroencephalography (EEG) are used to monitor brain activity. For emotional resonance and social cognitive goals, activity in specific brain regions was focused. By monitoring activity in these brain regions in real time, individuals can understand their brain response patterns. During training, individuals receive instruction to try to adjust brain activity. This is usually achieved through cognitive strategies, attention adjustment, or other techniques. Individuals are able to see real-time images or indications of their brain activity during the feedback process, allowing them to attempt to adjust these activities to reach predetermined treatment goals. For example, in the context of emotional resonance, individuals may activate and enhance activity in specific brain areas by

directing their thoughts and emotions, thereby strengthening their perception and empathy for the feelings of others [12]. The key to this approach to neurofeedback training is that it makes individuals more aware of and tune their thinking and emotional processes by providing real-time feedback on brain activity. This treatment can be effective in dealing with subjects whose lack of empathy leads to the emergence of cruel criminal acts or motives. Through the pathological analysis, according to the specific situation of the individual, the appropriate use of the therapy is to improve the individual empathy ability.

#### 4. Conclusion

Through literature review and case analysis, the study found a close link between empathy and criminal motivation. Offenders may experience setbacks in social relationships, emotional distress, or interpersonal conflict and lack positive emotional support. This lack of empathy may prompt them to seek the wrong ways to satisfy their needs, thus forming a criminal motive. An in-depth study of how empathy is applied in prevention strategies can provide new perspectives on crime understanding and intervention. Criminal behavior can be prevented by developing empathy, promoting positive social interactions, or providing emotional support. This comprehensive approach is vital for social construction and crime prevention. However, it is essential to note that the effectiveness of neurofeedback training varies from individual to individual and specific treatment goals. Moreover, lack of empathy results from multiple pathological factors and is not limited to mirror neurons and brain networks. We must continue exploring the relationship between lack of empathy and brain function to gain a deeper understanding of this complex issue.

#### Reference

- [1] Rogers, C. Client Centered Therapy (New Ed). Hachette UK, 2012.
- [2] Decety, J., & Moriguchi, Y. The empathic brain and its dysfunction in psychiatric populations: Implications for intervention across different clinical conditions. *BioPsychoSocial medicine*, 2007, 1(1): 1-21.
- [3] Covell, C. N., & Scalora, M. J. Empathic deficits in sexual offenders: An integration of affective, social, and cognitive constructs. *Aggression and violent behavior*, 2002, 7(3): 251-270.
- [4] Shin, D. Empathy and embodied experience in virtual environment: To what extent can virtual reality stimulate empathy and embodied experience. *Computers in human behavior*, 2018, 78: 64-73.
- [5] Davis, M. H. Empathy and prosocial behavior. *The Oxford handbook of prosocial behavior*, 2015, 282-306.
- [6] Miller, P. A., & Eisenberg, N. The relation of empathy to aggressive and externalizing/antisocial behavior. *Psychological bulletin*, 1988, 103(3): 324.
- [7] Jolliffe, D., & Farrington, D. P. Empathy and offending: A systematic review and meta-analysis. *Aggression and violent behavior*, 2004, 9(5): 441-476.
- [8] Wispé, L. The distinction between sympathy and empathy: To call forth a concept, a word is needed. *Journal of personality and social psychology*, 1986, 50(2): 314.
- [9] Singer, T., Seymour, B., O'doherty, J., Kaube, H., Dolan, R. J., & Frith, C. D. Empathy for pain involves the affective but not sensory components of pain. *Science*, 2004, 303(5661): 1157-1162.
- [10] Melloni, M., Lopez, V., & Ibanez, A. Empathy and contextual social cognition. *Cognitive, Affective, & Behavioral Neuroscience*, 2014, 14: 407-425.
- [11] Sitaram, R., Ros, T., Stoeckel, L., Haller, S., Scharnowski, F., Lewis-Peacock, J. ... & Sulzer, J. Closed-loop brain training: the science of neurofeedback. *Nature Reviews Neuroscience*, 2017, 18(2): 86-100.
- [12] Decety, J., & Moriguchi, Y. The empathic brain and its dysfunction in psychiatric populations: Implications for intervention across different clinical conditions. *BioPsychoSocial medicine*, 2007, 1(1): 1-21.