

The Relationship Between Emotion and Cognition with Moral Self-regulation

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Abstract: Background: Morality has perpetually remained a prominent subject of societal concern and scholarly investigation. Moral self-regulation occurs when individuals exhibit moral conduct while simultaneously maintaining equilibrium in their psychological states. While some studies have established a correlation between moral self-regulation and emotion as well as cognition, there remains a research gap in understanding the impact of these factors on moral self-regulation. Therefore, this paper provides a unified explanation of the relationship between emotion and cognition with moral self-regulation by reviewing and collating existing research. Result: Research has revealed that both emotions and cognitions exert an influence on moral self-regulation. Both positive and negative emotions can have a beneficial impact on moral self-regulation, with negative emotions possessing the potential to yield adverse effects. Individuals' cognition of themselves and others both contribute to the occurrence of moral self-regulation. The integration of emotions and cognitions facilitates the generation of appropriate moral behavior. Conclusion: Emotions and cognitions are pivotal determinants that influence moral self-regulation. Subsequent investigations should explore the role of additional factors, such as gender, in this process.

Keywords: moral self-regulation, emotion, cognition, moral licensing, moral cleansing

1. Introduction

Morality has been a hot topic for a long time. From Kant's Kantianism to Bianchin's utilitarianism, and later Kohlberg's theory of moral development and Bandura's theory of self-regulation. Nowadays, morality is still in the spotlight. It cannot be ignored that moral self-regulation is an important indicator of moral development.

Moral self-regulation is the process by which an individual adjusts moral or immoral behavior when facing a moral scenario to achieve balance [1]. Moral self-regulation is very common in everyday life. For instance, individuals often face the dilemma of choosing between helping others at the expense of personal benefits or prioritizing self-interests over altruism. It influences human moral behavior and contributes to maintaining mental balance. It might also yield various advantages such as building a positive reputation, experiencing emotional fulfillment, and receiving rewards for virtuous actions, among others. Consequently, this study holds significant importance in improving the comprehension of human moral behavior.

The factors that influence moral self-regulation are complex and varied, including social status, religious beliefs, and mental state. When a person is in a moral scenario, emotions and cognition

unconsciously influence the person's moral self-regulation and drive individuals to engage in subsequent moral behaviors [2].

The study aims to help understand moral self-regulation. So that emotions can be controlled in a rational way and moral scenarios in daily life can be recognized from a more objective perspective.

2. Moral Self-regulation

Moral self-regulation emphasizes that people maintain a balance in their moral state amidst fluctuations in good and bad moral behavior. While striving to refine their moral conduct, individuals are perpetually searching for a more perfect morality [3]. There are two ways of moral self-regulation, which are moral licensing and moral cleansing [1]. Moral licensing refers to the fact that the memory of past morally good behavior increases the likelihood of potential immoral behavior. Whereas moral cleansing means that the memory of a past immoral behavior contributes to more morally good behavior [1].

Moral licensing and moral cleansing can be seen as a form of compensatory behavior [4]. Moral values are raised or lowered after an individual's moral or immoral behavior. When moral values deviate from the desired level, individuals adapt by adjusting their responses accordingly [4]. In summary, instances of relatively immoral behavior arise when individuals perceive themselves as sufficiently moral (moral licensing). Conversely, when they experience a sense of immorality in their actions, they behave more proactively to make up for their previous immoral behavior (moral cleansing). As an illustration, people are much less likely to help the homeless after completing a volunteer service or voluntary donation. After ignoring an elderly person who fell on the side of the road, individuals are more inclined to contribute larger sums of money in charitable donations.

Emotions and cognition play distinct yet significant roles in the process through which moral license and moral cleansing are enacted. On the one hand, positive emotions such as sympathy lead to empathy for others' difficulties and promote more altruistic tendencies and helping behavior. On the other hand, negative emotions such as guilt and anger cause people to engage in more compensatory or harmful behavior. Individuals are motivated to engage in altruistic acts in order to derive the intrinsic satisfaction of assisting others, alleviate negative emotions, and achieve personal equilibrium.

From a cognitive perspective, perceptions of one's own behavior and the behavior of intimate others influence one's moral judgments and hence moral behavior. This cognition enables individuals to gain a deeper understanding of their own mental state and comprehend the circumstances in which they or their close others find themselves. Furthermore, it facilitates individuals in responding to moral scenarios in an effective way and with an appropriate attitude. Consequently, individuals' moral conduct becomes more in line with societal moral norms, thereby attaining mental balance.

3. The Relationship between Emotions and Moral Self-regulation

3.1. The Effect of Positive Emotions on Moral Self-regulation

Positive emotions exert a positive impact on moral self-regulation. It might foster individuals' commitment to justice and the preservation of social equity.

Sympathy can affect self-regulation positively, thus creating more altruistic tendencies in the individual. In Blitvich's study, six cases of online public shaming incidents and user comments were collected [5]. These cases encompassed instances of racial discrimination, such as the unjust treatment of individuals from marginalized communities by those belonging to the dominant race, acts of aggression, humiliation, and related phenomena. The comments were then coded and thematically analyzed. It was found that unfair incidents inspire empathy [5]. Empathy elicits feelings of compassion and fosters a heightened sense of concern and sympathy towards the victim. Then it

serves as a catalyst for individuals to proactively intervene in order to alleviate the victim's suffering or prevent immoral conduct.

Moreover, sympathy amplifies individuals' sense of moral obligation and shows a greater association with moral conduct. This behavior was observed when participants expressed disapproving remarks toward the perpetrator and exhibited significant concern and favoritism toward the victim [5]. Moral self-regulation plays a role in the process. Users emphasize that they are right and stand up for the victim to show their support for just moral behavior. Therefore, the sympathy evoked by the incident of public shaming is somewhat diminished, preserving the equilibrium of moral values to a certain extent.

3.2. The Effect of Negative Emotions on Moral Self-regulation

The impact of negative emotions on moral self-regulation is multifaceted. It encompasses more compensatory behavior (moral cleansing), including stimulation of introspection, punishment for injustices, and increased inclination towards concern for individuals who have experienced harm.

3.2.1. Positive Effects of Negative Emotions on Moral Self-regulation

In the context of cyberbullying, recent research conducted by Valdés-Cuervo has shown that the recognition of one's own actions causing harm to others induces feelings of guilt [6]. This negative emotion elicits positive moral self-regulation in a multifaceted way. (1) Guilt engenders introspection and self-reflection regarding the actor's behavior [6]. (2) It can motivate the actor to undertake affirmative moral actions to rectify their transgressions, such as offering apologies and actively repairing interpersonal relationships [6]. Over time, feelings of guilt could be a motivating factor for bystanders to engage in proactive intervention strategies aimed at curbing instances of cyberbullying. Throughout moral self-regulation, actors reflect and change their behavior in pursuit of growth and more correct and improved morality.

Moral self-regulation plays a comparable role in individuals confronted with social crises, threats, and unjust circumstances, with the exception of instances involving cyber violence. According to Green, after watching a video about a social crisis, participants were instructed to think and regulate their emotions based on the assigned experimental conditions [7]. In the immersion condition, participants were instructed to adopt a perspective aligned with community members [7]. However, those in the distancing condition were directed to approach the matter impartially [7]. The findings revealed a significant positive correlation between participants' attempts to adopt the victim's perspective and their high levels of moral outrage. These increased inclinations towards solidarity, as well as a greater propensity for donation [7]. Participants showed a greater inclination towards expressing emotions, particularly anger and moral indignation in response to injustice, as a means of regulating their mental state.

Perceptions of threat can exert a positive influence on an individual's moral self-regulation as well. Ward and King asked participants to recall recent moral transgressions [3]. After participants experienced a threat to their moral self-image, those who strongly identified with religious beliefs demonstrated an increased propensity for pro-social behavior. The prosocial behavior partially altered the participants' moral self-perception and mitigated the sense of threat. Although the study is associated with religion, it is mentioned that religion correlates less with moral self-regulation when religion and emotions cannot be linked [3].

Blitvich's research found that people developed anger and triggered moral indignation as a result of unjust events [5]. This negative emotion plays an important role in motivating people to take moral action. From the perspective of moral self-regulation, people punish offenders and express sympathy

for victims to achieve the goal of calming anger. It in turn promotes understanding and sympathy for the victimized group, maintaining a balance of moral values in the process.

3.2.2. Negative Effects of Negative Emotions on Moral Self-regulation

Indeed, negative emotions such as indignation can also engender relatively adverse moral self-regulation and deleterious behavioral outcomes. To illustrate, anger and indignation can contribute to the effectiveness of collective action, enhancing the group's decision-making capacity and the efficacy of its actions [5]. People with the same purpose act together. Although the behavior goes some way towards enabling individuals to achieve a mental state that is more comfortable for them, it often manifests itself in harmful behaviors such as rioting and cyber violence.

As for the victims, Arató found that the distress caused by negative emotions can lead individuals to experience profound sadness [8], thereby impacting their social functioning, cognitive well-being, and moral self-regulation. Inadequate moral self-regulation may ultimately result in harmful behaviors such as uncontrollable substance abuse and even causing harm to others [8].

4. The Relationship between Cognition and Moral Self-regulation

4.1. The Effect of Self-awareness on Moral Self-regulation

Individuals' perceptions of their own behavior, moral values, and level of morality exert an influence on their subsequent moral self-regulation. When individuals develop a perception of sufficient moral adequacy, they engage in moral self-regulation and modify their moral conduct in a more virtuous manner. In Clot, Grolleau, and Ibanez's study, participants were initially provided with opportunities to cultivate moral credentials and establish a pro-social self-concept through various methods (solving puzzles or engaging in imaginative exercises involving acts of kindness) [9]. The participants were subsequently informed that the university had received a research grant. This money necessitated investment in the enhancement of the university's infrastructure. Participants were allowed to take any amount out of this funding, with explicit instructions that such withdrawals would directly diminish the available funds for the university. It was observed that participants were more inclined to act selfishly subsequent to developing the perception of being sufficiently competent in their current actions. In the experiment, participants showed a higher propensity to withdraw more money after accumulating moral credibility [9].

Seçilmiş's study found similar results [1]. There were two treatments in the experiment. In treatment 1, (1) participants were given the opportunity to overstate their performance levels in order to enhance their financial gains. This task allowed direct observation of the cheating behavior (deception) [1]. (2) Participants were given the autonomy to determine the amount of funds to allocate to the collective account. This task provides participants with the opportunity to demonstrate moral levels by allowing them to donate [1]. In treatment 2, the order of the two tasks was altered. Participants initially developed a certain level of moral consciousness regarding their conduct through the allocation of funds to the group account (donations), subsequently reporting their performance for their financial gains. The results showed that subjects in treatment 2 were more likely to choose deceptive behavior [1]. The phenomenon of moral licensing emerged during the experiment. It led participants to engage in increased fictitious altruistic behavior as a result of developing self-cognition of virtuous conduct. Additionally, Seçilmiş discovered that the donation levels of participants exerted an influence on their engagement in deceptive conduct [1]. To illustrate, participants who donated higher amounts were more likely to choose deceptive behavior. The propensity for selfish behavior increased when participants developed moral cognition of self-kindness.

Sachdeva, Iliev, and Medin conducted an experiment [4]. The findings provide valuable insights into the impact of cognition on moral self-regulation. Participants were asked to write a story related to themselves that contained words for positive or negative characteristics [4]. They were then requested to donate a certain amount of money to charitable causes. The results revealed that participants who wrote stories containing positive traits donated significantly less money, compared to participants who wrote stories containing negative traits who donated more money [4]. The perception of one's own behavior has an impact on individuals' moral self-regulation and leads to the occurrence of moral licensing.

Consequently, when individuals have the perception that they are already good enough, their moral self-regulation allows them to act more selfishly and less benevolently (moral licensing). The outcome of such behavior typically manifests in reduced levels of altruism and prosocial conduct.

4.2. The Effect of Cognition of Others' Behavior on Moral Self-regulation

In addition to self-perceptions, an individual's perceptions of others also influence moral self-regulation. The impact of others' behaviors varies depending on the degree of intimacy in their relationship with the individual. Perceptions of the existing behavior of close others have a substitutive regulatory effect on moral self-regulation, which is known as the "variable moral self-regulation effect" [10]. When individuals have less proximity to others, their behavior exerts a diminished influence on the individual's moral self-regulation.

According to Xiao, Zhan, and Zhong, human moral behavior could be influenced by close others [10]. In their study, the participants were requested to assess a same-sex close acquaintance's engagement in common environmental behavior (recycling waste paper) or uncommon environmental behavior (writing letters to the government with suggestions for environmental protection) [10]. The results indicated that more environmentally friendly behaviors by close others may lead individuals to show a greater degree of self-interest in the subsequent experiment [10]. As the environmental behavior of close others made individuals feel permission for their own behavior, participants tended to opt for decisions resulting in higher carbon emissions to receive greater financial compensation [10]. Individuals will regulate their moral behaviors due to their perception of the morality level of close others, thereby triggering the emergence of moral self-regulation.

Furthermore, the moral behavior of close others can also elicit a moral identity impact on individuals [10]. For example, the good behavior of close others will motivate individuals to show more good behavior, whereas the immoral behavior of close others will cause an increase in immoral behavior. Thus, the behavior of close others may either induce adverse moral self-regulation or exert a positive influence on an individual's behavior.

For people in ordinary relationships, their behavior lacks the same degree of variable moral self-regulation observed in close others. In Sachdeva, Iliev, and Medin's other study, participants were instructed to create a story about themselves that contained words for either positive or negative traits [4]. Subsequently, they were randomly assigned to write the character in the story as either themselves or someone they knew [4]. The results of the experiment showed that positive and negative traits had an effect on the number of donations only when participants were told to write stories about themselves, whereas perceptions of others' behavior did not produce the same results [4]. Individuals engage in moral self-regulation based on their prior behavior, while the perceptions of ordinary individuals do not exert a comparable influence on moral self-regulation.

5. Discussion

5.1. The Effect of Emotion and Cognition on Moral Self-regulation

Both emotions and cognition can influence moral self-regulation, yielding both positive and negative outcomes. Emotions can both interfere with moral self-regulation and facilitate it. Positive emotions, such as empathy, and negative emotions, such as anger, contribute to enhanced moral self-regulation. Emotions motivate people to introspect regarding their own problems and embrace principles of justice [7] so that they can constantly strive for better morality. Emotions also drive individuals to care for the disadvantaged and produce more altruistic behavior. Conversely, negative emotions can detrimentally impact moral self-regulation. They can lead to irrational collective behavior [5]. From an individual's perspective, negative emotions can also give rise to severe physical or psychological complications, leading to issues such as substance misuse [8].

Regarding cognition, the perceptions of their own behavior and the behavior of intimate others can impact the individuals' moral behavior, which involves both moral self-regulation and variable moral self-regulation effect [4,9,10]. By regulating one's moral behavior in the desired moral direction, people could maintain a harmonious mental state. During this period, moral licensing assumes a role.

5.2. The Effect of Emotion-cognition Interactions on Moral Self-regulation

When emotions and cognitions are considered in isolation as independent influences on moral self-regulation, they have a positive or negative influence. The crucial aspect that cannot be disregarded is the integration of effect and cognition. It has important implications for moral self-regulation as well [2].

Traditionally, emotions have affected people's perceptions of events, which affect rational judgment and lead to biased decisions. This highlights the adverse effects of emotions on moral self-regulation. However, emotions can not only impede self-regulation but also facilitate it in specific contexts [2]. Emotions possess the capacity to guide cognition, directing individuals toward more appropriate problem-solving and conflict-resolution strategies. The integration of emotions and cognition optimizes an individual's moral self-regulation.

5.3. Other Factors in the Influences of Cognition on Moral Self-regulation

In Clot, Grolleau, and Ibanez's research on cognition, they also explored the impact of gender factors on cognitive influences in moral self-regulation [9]. They found that females might be fairer and more cooperative than males [9]. In addition, the researchers mentioned that females might be more selfless than males [9]. As a result, women may be more likely than men to engage in moral self-regulation to alleviate the unbalanced psychological state that occurs when confronted with moral scenarios.

Previous experiences also influence the role of cognition in moral self-regulation [1]. This phenomenon is frequently associated with moral licensing and moral cleansing. Past moral behaviors generate moral credibility and increase the likelihood of individuals exhibiting potentially immoral behaviors [1]. Individuals regulate their moral behavior to maintain a sense of moral self-worth [1]. For instance, people may exhibit heightened altruistic tendencies as a compensatory mechanism for prior immoral actions.

6. Conclusion

The study explores the relationship between emotion and cognition in the context of moral self-regulation. It demonstrates that an individual's moral self-regulation can be influenced by both emotions and cognitions. This influence is related to the type of emotion and the object of the

cognition. The rationale behind it lies in individuals' pursuit of achieving a harmonious mental state. The diverse emotions and cognition that individuals hold towards themselves and others serve as the foundation upon which they regulate their moral conduct. Furthermore, moral self-regulation can be influenced by either emotions or cognitions independently, or through a combined effect of both.

Future research could investigate the influence of gender and past experiences on how emotions and cognitions affect moral self-regulation. The positive effects of emotions and cognition on moral self-regulation should also be further investigated. It could offer valuable insights for further comprehension of human moral behavior and the reasons behind it.

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