

# Effects of Moral Self-regulation on Prosocial Intentions in Chinese College Students

Yuxin Zhuang and Liang Chen

**Abstract**—This research aimed to determine the effects of moral self-regulation on prosocial intentions in Chinese college students. College students were randomly assigned to three different groups to write about concrete behavior that they performed in the recent past. One group that recalled the recent concrete immoral behavior reported greater prosocial intentions than individuals who recalled their recent concrete moral behavior and the matched group. College students who recalled their recent concrete moral behavior reported less prosocial intentions than the other groups. In conclusion, the moral self-regulation process could be influenced by the moral self in Chinese college students.

**Index Terms**—Moral self-regulation, moral cleansing effect, moral licensing effect, college students.

## I. INTRODUCTION

In the last decade, research on the moral function of what motivates moral action is a hot topic in the area of moral psychology. While most theories have focused on the part of moral reasoning, others have emphasized moral emotion. Cognitive developmental theory of morality developed by Kohlberg and Kramer (1969) argues that moral action is motivated by moral principles [1]. Turiel's influential social domain theory (2002) pointed out the cognitive role in the moral function [2]. Hoffman focused on the role of moral emotion relative to cognitive perspectives on morality and posited that "... abstract moral principles, learned in "cool" didactic contexts (lectures, sermons), lack motive force. Empathy's contribution to moral principles is to transform them into prosocial hot cognitions—cognitive representations charged with empathic affect, thus giving them motive force" [3].

Some scholars have attempted to strengthen the relationship between moral reasoning and moral emotion, indicating that expectancies significantly act on moral action. However, as with moral reasoning, the relation between empathy and prosocial behavior tends to be small to moderate in magnitude [4]. Therefore, an increasing number of studies have focused on another main factor, namely, moral self or

moral identity, which seems to be related more to moral functioning than to moral emotion and moral reasoning [5], [6].

The moral self can be conceptualized as the values and beliefs that become integrated into the self and are represented in an individual's self-view [7]. Therefore, moral self holds the position of a regulator of moral conduct [8]. On the basis of the perspective of social cognitive theory [9], Aquino assumed that moral identity is stored in a person's memory as a complex knowledge structure comprising moral values, traits, goals, and behavioral scripts [10]. Some studies support this view by proving the function of moral identity for predicting moral outcomes [10], [11].

Blasi had studied the concept of moral identity since the 1980s. According to Blasi [7], identity maturity is related to an increasing sense of agency, which makes individuals consider certain aspects of themselves (e.g., goals, values, emotions, and personality traits) as central to their sense of self. Individuals selectively and carefully dominate moral values with personal goal by integrating them into their sense of self [5]. The consequence of moral values to the self is related to prosocial behavior and intentions. Some scholars have claimed that moral exemplars would use moral personality traits and moral goals when asked to describe themselves in contrast to a matched group of peers.

Moral self can predict not only the individual description but also moral behavior. A study showed that helping activities had a close relationship with later moral self among late adolescents [12]. On the basis of Blasi's concepts, Aquino and Reed divided moral identity into two scales: internalization and symbolization. Internalization refers to a series of the degree of moral characteristics in the center of the individual self-concept. Symbolization refers to the moral characteristics in public through individual moral behavior. Aquino and Reed (2002) reported that both internalization and symbolization are significantly positively related to self-report voluntary action among college students [10]. In other words, compared with individuals who keeping low moral identity, individuals who holding high moral identity reported more voluntary action. However, internalization but not symbolization positively predicted actual donation behavior among adolescents. Barriga (2001) experimentally studied moral identity and examined links between moral self and antisocial behavior among late adolescents [13]. Moral self-relevance was found to be negatively related to antisocial behavior (externalizing), controlling for internalizing behaviors, gender, moral judgment, and self-serving cognitive distortion. These studies suggested positive associations between moral identity (moral self) and moral action from adolescence to adulthood.

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Although some empirical research has been found for links between moral identity and moral action in adults, prior research has not examined the role of culture in the effects of moral identity. Therefore, we hypothesize that moral cleansing and moral licensing also function in Chinese college students.

## II. METHOD

### A. Participants

Ninety college students (71% women;  $M_{age} = 19.12$ ,  $SD = 0.90$ ) were randomly selected to participate in this study in an introductory psychology course. We randomly assigned them to the moral, immoral, or control condition. Among them, six participants did not complete the essay task (three in the immoral condition and 3 in the moral condition). The final Z score result was  $N = 77$ . The study protocol was approved by the institutional review board of the School of Marxism, University of Science and Technology Liaoning (China). The students had to sign a consent form to participate in the research.

### B. Materials

Moral behavior recall manipulation. Participants were randomly assigned to the positive trait, neutral word, or negative trait group. The participants copied a list of nine words and carefully considered the meaning of each word for them. Then, in consideration of the cultural difference between the Chinese words and the original words in the Sachdeva's study [14], two negative trait adjectives and four positive trait adjectives were replaced. Moreover, we used neutral adjectives to replace neutral nouns. After accomplishing the copying task, the participants wrote down a concrete story that happened last week about either themselves or strangers that included all the words they had just copied. Each story required at least 200 words to the whole process of what happened.

Prosocial Tendencies Measure for Adolescent (PTM-RC). PTM-RC is a self-report instrument designed to evaluate prosocial tendency [15]. It contains 26 items and measures 6 scales (public, anonymous, altruistic, compliant, emotional, and dire). A seven-point Likert scale ranging from 1 (very unlikely) to 7 (very likely) was used for the PTM-RC items. The Cronbach's  $\alpha$  values of the PTM-RC in the sample of Chinese adults and adolescents were 0.56–0.78. Factor analysis revealed good support for the structure of prosocial tendency. Carlo and Randall (2002) demonstrated that prosocial tendency has a significant positive correlation with prosocial behavior [16]. All the respondents who volunteered to participate in the study were rewarded with a gift (e.g., pen).

### C. Procedure

The participants were invited to the laboratory room and asked to complete all materials on a paper questionnaire. They were randomly assigned to either the moral or immoral group to write about concrete behavior that they performed in the recent past. The experimenters informed the participants that the study focused on the relationship between

imagination ability and personality, and that they would be required to write stories to be able to examine their imagination ability.

After filling in the PTM-RC, the participants were asked to respond to items on a scale from 1 = extremely immoral to 7 = extremely moral to assess the valence of the adjectives. Finally, the participants were debriefed and thanked for their participation.

### D. Statistical Analyses

To test the research hypothesis, one-way ANOVA, independent-samples T test, and reliability analysis were conducted by SPSS version 20.0.

## III. RESULTS

The Cronbach's  $\alpha$  value was 0.79. A one-way ANOVA revealed a significant effect of conditions on the average valence of the adjectives,  $F_{(2, 74)} = 3650$ ,  $p < 0.001$ . Relative to the valence of the neutral adjectives ( $M = 36.50$ ,  $SD = 1.82$ ,  $n = 24$ ), the valence of the positive traits was significantly more positive ( $M = 11.89$ ,  $SD = 1.45$ ,  $n = 28$ ) and the valence of the negative traits was significantly more negative ( $M = 57.36$ ,  $SD = 2.46$ ,  $n = 25$ ).

**Prosocial intentions.** A one-way ANOVA on the participants' prosocial intentions revealed a significant effect on condition,  $F_{(2, 74)} = 8.61$ ,  $p < 0.001$  (see Figure 1). Relative to the controls ( $M = 19.80$ ,  $SD = 6.37$ ,  $n = 24$ ), the participants in the moral condition had marginally weaker prosocial intentions ( $M = 15.06$ ,  $SD = 9.32$ ,  $n = 28$ ),  $p = 0.050$ , and those in the immoral condition had significantly stronger prosocial intentions, ( $M = 24.72$ ,  $SD = 9.00$ ,  $n = 25$ ),  $p = 0.047$ .

An independent-samples T test was performed, with age as the independent variable and prosocial intentions as the dependent variable. Prosocial intentions in the moral and immoral conditions were different from those in the control condition,  $t = 2.34$ ,  $p = 0.023$ , and  $t = 2.07$ ,  $p = 0.044$ , respectively.

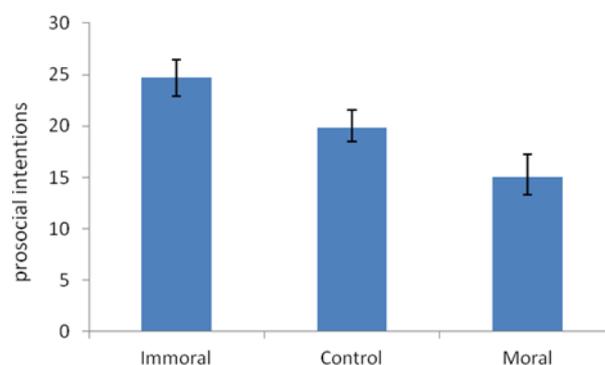


Fig. 1. Participants' prosocial intentions across immoral, control, and moral condition.

Combining the data from two age groups, significant main effects were found on different conditions,  $F_{(2, 141)} = 12.97$ ,  $p < 0.001$ . When the participants wrote about a recent event, those who recalled a concrete immoral event had more prosocial intentions ( $M = 27.34$ ,  $SD = 9.23$ ,  $n = 50$ ) than those who recalled an immoral event ( $M = 17.94$ ,  $SD = 10.21$ ,  $n =$

50),  $p = 0.003$ . Conversely, those who recalled a recent concrete moral event had marginally less prosocial intentions ( $M = 21.70$ ,  $SD = 7.59$ ,  $n = 46$ ) than those who recalled an immoral one,  $p = 0.055$ .

By presenting the recall and intention tasks in this study, we provided additional support for the hypotheses that moral compensation was initiated by the recent concrete (im)moral behavior in late adolescence. We found that, relative to the control condition, recalling immoral behavior resulted in stronger prosocial intentions and that recalling moral behavior resulted in (marginally) weaker prosocial intentions. These results were similar to the research of Jordan and his colleagues [17].

#### IV. DISCUSSION

In this study, we found evidence that the recent concrete immoral behavior motivated compensatory prosocial intentions and that the recent concrete moral behavior did motivate prosocial intentions in college students. Either less morally (moral licensing) or more morally (moral cleansing) behavior was performed to compensate for these departures from a normal state of being [14]. We also found that participants who only wrote stories about themselves showed moral cleansing but not when they wrote about other strangers in this study. This effect demonstrated that prosocial motivation was only affected by a self-relevant prior immoral behavior. Considering other people's immorally relevant behavior did not cause this outcome. This result was consistent with previous studies that moral cleansing effect and moral licensing effect just worked on personal dimension but not others dimension[18].

In this study, we clarified the role of moral self-regulation in moral intentions in college students using a single adapted method [14][19]. According to the evolutionary models of morality, Sachdeva demonstrated that people aspire to maintain a comfortable moral self-worth against the costs inherent in prosocial behavior [14]. Accordingly, they found that contrasting behaviors are controlled by a negative feedback loop around a standard level: deviation from this level in either direction, either when view of the self as a moral individual is threatened or when this comfortable level is surpassed, results in compensatory behaviors [14]. This study supports this view of moral behavior fluctuating in a negative feedback loop in late adolescence but not in middle adolescence. These findings suggest that a recent stimulating event (i.e., recollection of an immoral behavior) seems to provide over time a strong sense of incompleteness of moral self-worth and arouses subsequent moral motivation in adolescence. Relative to young adults who exhibit maturity of the moral self, when adolescents recall their immoral behavior (and experience an incomplete moral self-worth), they show a stronger tendency to restore their impaired moral identities than when they recall their moral behavior (and meet the need for moral self-worth advancement).

In current moral psychology research field, there are a lot of researches on moral cleansing effect. Meanwhile, there are also some studies about moral licensing effect. Relatively few researches pay attention to these two effects in the same

experiment. One of the limitations of this study is probably the use of a sample that is not representative of all Chinese college students. Thus, extending the research through a combination of stratified sampling and cluster sampling should be considered to verify the validity of this study in Chinese college students with other characteristics. Another limitation of this study is the use of prosocial trait to evaluate prosocial tendency. Therefore, prosocial tendency should also be measured by more accurate indicators in future studies.

#### V. CONCLUSION

The study demonstrates that feeling moral does not always motivate moral intentions in middle adolescence. Recalling past immoral behavior makes middle adolescents renew their moral striving depending on their subsequent compensatory behavior. This study is a step toward considering the role of moral self in compensatory effects among Chinese college students. Future research may also explore these effects using multitrait-multimethod analysis. Overall, the evidence provided by this study can guide practitioners in identifying ways to strengthen the moral education of college students to reduce compensatory unethical behaviors.

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