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ARTICLE

Experimental Study on the Influence of Cognition and Emotion on Moral Judgment of College Students in Dilemma Situation

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ABSTRACT

Objective: To study the influence of cognition and emotion on moral judgment of college students under the circumstance of whether the cognitive resources are occupied and whether the emotion is induced. **Methods:** This experiment uses a multi-factor mixed experiment method to divide experiments and groups. Experiment 1 uses a two-factor mixed experimental design of 2 (cognitive resource occupancy group, cognitive resource non-occupied group) × 3 (difficult situation type). Experiment 2 uses a two-factor mixed experimental design of 2 (emotion induction group, emotion induction and cognitive resource occupation group) × 3 (three types of dilemma situation types) is adopted. The dependent variable of this experiment (including Experiment 1 and Experiment 2) is the judgment response time and the judgment result is "Yes" (F) or "No" (J). **Results:** (1) The reaction time of the cognitive resource occupancy group was significantly higher than that of the cognitive resource non-occupied group, and the cognitive resource occupancy group in the three types of dilemma situations of high personal involvement, low personal involvement, and non-personal participation. There is no significant difference between the results of moral judgments and the cognitive resource non-occupied group. (2) In the three dilemmas of high personal involvement, low personal involvement, and non-personal participation, the emotion-induced group and the emotion-induced and cognitive resource occupation group have no significant differences in reaction time and moral judgment results. (3) In the three dilemmas of high personal involvement, low personal involvement, and non-personal participation, the reaction time difference between the cognitive resource occupation group and the emotionally induced and cognitive resource occupation is not significant, while in the dilemma of low personal involvement, the number of people in the cognitive resource occupation group whose moral judgment is "Yes" was significantly higher than that in the emotionally induced and cognitive resource occupation group. (4) In the three dilemmas of high personal involvement, low personal involvement, and non-personal participation, the reaction time of the emotionally induced group was significantly higher than that of the cognitive resource non-occupied group, and the moral judgment results of the two groups were both found no significant difference. **Conclusion:** When the occupation of cognitive resources and the induction of emotions will significantly affect the response of individual moral judgments, different types of dilemmas will significantly affect the results of individual moral judgments.

KEYWORDS

College students; dilemma situation; moral judgment; cognitive; emotion

1 Introduction

As a hot topic of moral psychology research, moral judgment is an individual's judgment of good or evil value to others or his thoughts and practices based on his moral values, social, moral principles, and moral norms. It is the essential part of human moral elements and the basis and premise of individual moral emotion, moral will, and moral behavior.

The traditional Moral judgment research has since followed the rationalism of Piaget and kohl's burger mode, namely moral judgment mainly by reasoning and thinking [1]. However, this theory overemphasizes the role of reason in moral judgments while ignoring the role of emotional intuition. It cannot explain the phenomenon of "moral silence" that quickly makes moral judgments but cannot explain the reasons and has certain limitations. The social intuitive model theory challenges this, pointing out that moral judgment is caused by rapid moral intuition, followed by slow and retroactive moral reasoning [2]. Intuition is more important than reasoning, and conscious reasoning occurs after people make moral judgments, so logical reasoning does not play a dominant role. With the deepening research of moral psychology, it is found that two systems may influence individuals simultaneously when they make moral judgments in the face of moral events, that is, the double processing of reasoning and intuition. Based on this, Greener proposed the double-processing theory of moral judgment, which holds that intuition and reason work together in moral judgment. When people make a choice, they are influenced by two systems simultaneously: the intuitive system and the cognitive system, which work together to promote moral judgment behavior [3]. From the above theory of moral judgment, it can be seen that there are different opinions on the influence of cognition and emotion on moral judgment. The intuition system influences personal moral judgment preferences through personal emotional preferences and other contextual knowledge, while the cognitive system is based on personal acquired learning and experience. Social knowledge, such as growth experience, etc., affects the results of personal moral judgment. Therefore, seeking the specific mechanism of reasoning and intuition emotions in moral judgment is the focus of controversy. In today's society, the dilemma that people encounter is gradually increasing, such as the "help or not" facing the elderly and the "help or not" in the face of school violence, and how does the individual's cognitive and emotional status at the time affect the impact Moral judgment, in order to explore the mechanism of cognition and emotion in moral judgment in dilemma situations, it uses cognitive resource occupation and emotional induction as conditions, dilemma story situations as materials, and contemporary Chinese college students' cognitive and intuitive foundations as experiments Based on the background of the object, use its moral status as an independent variable to study its moral judgment, so as to understand the influence of cognition and emotion on moral judgment in college students, which helps to clarify the cognition and emotion in moral judgment The mechanism of action and enriching the theory of moral judgment have important practical significance for promoting the development of the moral judgment ability of college students.

2 Research Methods

2.1 Sample

A total of 248 college students from two universities in Hainan Province and Henan Province were randomly selected, among which 124 were selected in Experiment 1 and Experiment 2, respectively. All the subjects were right-handed, with normal vision or corrected vision, healthy body and without any mental diseases.

2.2 Methods

2.2.1 Experimental Materials

Dilemma materials

Dilemma situations are divided into three types of situations: high personal involvement, low personal involvement, and non-personal involvement according to the personal involvement level standards of

Conway and Looto, etc., each with three stories, among which, high personal involvement The context of the degree is selected from the dilemma prepared by Conway et al. [4,5], and the context of low personal involvement and non-personal participation are both selected from the morality prepared by Zhang et al. [6].

Emotion inducing materials

The positive, negative and neutral images of emotions were all from Chinese Affective Picture System (CAPS), which had high internal consistency and retest reliability in each dimension. The selection of pictures was related to the content of dilemma materials, and the selection of pictures was related to the main plot and characters of the story. Specific selection principles were based on Conway's research principles in 2013 [4].

The positive and negative affect scale

In order to measure the emotions of the subjects before and after the experiment, so as to know whether the emotions were successfully induced, the positive and negative affect scale (PANAS) was adopted [7,8], Cronbach's homogeneity reliability coefficients of the scale were 0.85 and 0.83, respectively. There are a total of 20 items in the scale. Nos. 1, 3, 5, 9, 10, 12, 14, 16, 17 and 19 were on the positive emotional dimension, and Nos. 2, 4, 6, 7, 8, 11, 13, 15, 18 and 20 were on the negative emotional dimension.

2.2.2 Experimental Design

Experiment 1

2 (cognitive resource usage, cognitive resources occupancy) × 3 (high personal involvement in degree, low personal involvement in degree, not personal participation) mixed experimental design of two factors was used by Experiment 1. Each group randomly assigned 62 different subjects, all participants receive three types of dilemma situation (high personal involvement in degree, low personal involvement in degree, not personal participation). The purpose of Experiment 1 was to explore the influence of cognitive resource occupation on the moral judgment of college students in different types of dilemma situations without emotional elicitation.

Experiment 2

2 (emotions induced, induce and cognitive resources occupancy) × 3 (high personal involvement in degree, low personal involvement in degree, not personal participation) mixed experimental design of two factors was used by Experiment 2. Each group randomly assigned 62 different subjects, all participants receive three dilemma situations (high personal involvement in degree, low personal involvement in degree, not personal participation). The purpose of this study was to explore the influence and difference of the occupation of cognitive resources on the moral judgment of college students in different types of dilemma situations.

2.2.3 Experimental Procedures

Experiment 1

Cognitive resource occupancy group

First of all, the subjects rested for 5–10 min and then scored with the PANAS in order to understand the emotional state of the subjects before the experiment. After that, the subjects entered the E-Prime program on the computer. They first performed the story judgment exercise to familiarize themselves with the experimental process, and then entered the formal experiment. Formal experiment presented a dilemma story situation after the subjects were asked to remember a string (for example, n63 # m1Q5), memory time for 30 s, and demanded that the oral repeat right (string was random update, each string was 8 characters long, containing at least one capital letter, a lowercase letter and a punctuation. All the participants' strings and dilemmas were randomly matched), and after reporting the correct strings, they made a moral judgment of "Yes (F)" or "No (J)" about the story situation, and recorded the response

time. Among them, the choice of "Yes" represented the moral judgment considered from the result, reflecting the participation of more cognitive reasoning factors, while the choice of "No" represented the moral judgment considered from the material process itself, reflecting the participation of more emotional factors.

Non-occupying group of cognitive resources

First of all, the subjects rested for 5–10 min and then scored with the PANAS in order to understand the emotional state of the subjects before the experiment. After that, the subjects entered the E-Prime program on the computer. They first performed the story judgment exercise to familiarize themselves with the experimental process, and then entered the formal experiment. In the formal experiment, the subjects did not need to memorize the string, but directly entered the E-Prime program to read the dilemma story situations and make moral judgments of "Yes (F)" or "No (J)", and recorded the response time. Among them, the choice of "Yes" represented the moral judgment considered from the result, reflecting the participation of more cognitive reasoning factors, while the choice of "No" represented the moral judgment considered from the material process itself, reflecting the participation of more emotional factors.

Experiment 2

Emotion inducing group

First of all, the subjects rested for 5–10 min and then used the PANAS for self-rating to understand the emotional state of the subjects before the experiment. After that, the subjects entered the E-Prime program on the computer. They first performed the story judgment exercise to familiarize themselves with the experimental process, and then entered the formal experiment. In the formal experiment, the subjects watched emotion-induced pictures (all the pictures were selected from CAPS, and each dilemma situation corresponds to one picture and is related to the content or protagonist of the dilemma situation). The pictures were presented for 20 s, and then the subjects rated the pictures with the PANAS. If the score was significantly higher than that before the experiment, it was indicated that the emotion was induced successfully. Then participants read the dilemma situation and made a moral judgment of "Yes (F)" or "No (J)", and the response time was recorded. Among them, the choice of "Yes" represented the moral judgment considered from the result, reflecting the participation of more cognitive reasoning factors, while the choice of "No" represented the moral judgment considered from the material process itself, reflecting the participation of more emotional factors.

Emotional induction and cognitive resource occupancy group

First of all, the subjects rested for 5–10 min, and then used the PANAS for self-rating to understand the emotional state of the subjects before the experiment. After that, the subjects entered the E-Prime program on the computer. They first performed the story judgment exercise to familiarize themselves with the experimental process, and then entered the formal experiment. Formal experiment presents a dilemma story situation after the subjects were asked to remember a string (for example, n63 # m1Q5), memory time for 30 s, and demanded that the oral repeat right (String was randomly update, each string was 8 characters long, containing at least one capital letter, a lowercase letter and a punctuation. All strings and dilemma situation of subjects were randomly matched), then subjects were trying to watch the mood induced images (Pictures were selected from CAPS, corresponding to each of the dilemma situation picture and related with the dilemma situation or the content of the main character), image rendering 20 s. Subsequently, PANAS was used for scoring. If the score was significantly higher than before the trial, it showed that emotional induction was successful. Then they made a moral judgment of "Yes (F)" or "No (J)" about the story situation, and recorded the response time. Among them, the choice of "Yes" represented the moral judgment considered from the result, reflecting the participation of more cognitive reasoning factors, while the choice of "No" represented the moral judgment considered from the material process itself, reflecting the participation of more emotional factors.

3 Results

3.1 Result Analysis of Experiment 1

3.1.1 Differences in Response Time between Cognitive Resource Occupancy Group and Cognitive Resource Non-Occupancy Group

Table 1 showed that in the situation with high personal involvement, the response time of the cognitive resource occupancy group was significantly higher than that of the cognitive resource non-occupancy group, while in the situation with low personal involvement and non-personal involvement, the response time difference between the cognitive resource occupancy group and the cognitive resource non-occupancy group was not significant ($P > 0.05$).

Table 1: The difference of response time in different situation types between the cognitive resource occupancy group and the cognitive resource non-occupancy group

Situation types	Group	*M*	*SD*	*t*	*P*
High personal involvement	Cognitive resource occupancy group	42058.457	21220.328	3.158**	.002
	Cognitive resource non-occupancy group	31294.500	16434.988		
Low personal involvement	Cognitive resource occupancy group	24020.973	13462.956	1.509	.134
	Cognitive resource non-occupancy group	20639.710	11396.836		
Non-personal involvement	Cognitive resource occupancy group	23284.188	13049.689	1.279	.203
	Cognitive resource non-occupancy group	20489.489	11219.537		

3.1.2 Differences in Moral Judgments between the Cognitive Resource Occupancy Group and the Cognitive Resource Non-Occupancy Group

Table 2 showed that, in terms of moral judgment results, the proportion of "Yes (F)" judged by the subjects was statistically analyzed. Each situation type had three stories, so each situation type was divided into four ratios: 0 meant no selection of "F", 0.33 meant one selection of "F", and 0.67 meant two selections of "F". 1 meant I picked "F" three times. As seen from Table 3, there was no significant difference in the results of moral judgments between the cognitive resource occupancy group and the cognitive resource non-occupancy group in the three types of dilemma situations.

Table 2: Number of people whose judgment result was "F" in the cognitive resource occupancy group and the cognitive resource non-occupancy group (n, %)

Dilemma types	Group	n ($F = 0$)	n ($F = 0.33$)	n ($F = 0.67$)	n ($F = 1$)
High personal involvement	Cognitive resource occupancy group	5 (8.1)	17 (27.4)	22 (35.5)	18 (29)
	Cognitive resource non-occupancy group	11 (17.7)	14 (22.6)	18 (29)	19 (30.6)
Low personal involvement	Cognitive resource occupancy group	4 (6.5)	0 (0)	27 (43.5)	31 (50)
	Cognitive resource non-occupancy group	3 (4.8)	3 (4.8)	27 (43.5)	29 (46.8)
Non-personal involvement	Cognitive resource occupancy group	24 (38.7)	19 (30.6)	9 (14.5)	10 (16.1)
	Cognitive resource non-occupancy group	16 (25.8)	21 (33.9)	14 (22.6)	11 (17.7)

Table 3: Differences in moral judgment results between the cognitive resource occupancy group and the cognitive resource non-occupancy group

Dilemma types	Group	x^2	P
High personal involvement	Cognitive resource occupancy group	2.967	0.397
	Cognitive resource non-occupancy group		
Low personal involvement	Cognitive resource occupancy group	3.210	0.360
	Cognitive resource non-occupancy group		
Non-personal involvement	Cognitive resource occupancy group	2.835	0.418
	Cognitive resource non-occupancy group		

3.2 Result Analysis of Experiment 2

3.2.1 Differences in Response Time between the Emotion-Induced Group and the Emotion-Induced and Cognitive Resource Occupancy Group

Emotions induced group and induce-cognitive resources in three dilemma situation occupancy group were using the emotions evoked images, and accordingly the emotional self-rating scale of evaluation to understand the subjects induced emotions, emotions evoked set induced before and after the mood induced by positive emotions, negative emotions were significant difference ($t = 6.963$, $P < 0.001$; $t = -2.500$, $P < 0.05$, respectively), there were significant differences in positive and negative emotions before and after emotional induction ($t = -8.689$, $P < 0.001$; $t = -1.961$, $P < 0.05$), indicating that the emotions of the subjects were successfully stimulated through the pictures, which met the necessary conditions for the experiment. Table 4 showed that in the three situations of high personal involvement, low personal involvement and non-personal involvement, there were no significant differences in response time between the emotion-elicitation group and the emotion-elicitation and cognitive resource occupancy group.

Table 4: The difference of response time between the emotion-induced group and the emotion-induced group with cognitive resource occupation group

Dilemma types	Group	M	SD	t	P
High personal involvement	Emotion-induced group	43249.408	24431.643	−0.072	0.943
	Emotion-induced with cognitive resource occupancy group	43553.339	22458.757		
Low personal involvement	Emotion-induced group	25480.242	13182.861	0.018	0.986
	Emotion-induced with cognitive resource occupancy group	25432.323	16755.799		
Non-personal involvement	Emotion-induced group	25377.548	13221.628	−1.279	0.203
	Emotion-induced with cognitive resource occupancy group	26344.506	15017.637		

3.2.2 Differences in Moral Judgment Results between the Emotion-Induced Group and the Emotion-Induced Group with Cognitive Resource Occupancy

Table 5 showed that in terms of moral judgment results, the proportion of the subjects' judgment as "Yes (F)" was statistically analyzed. Each situation type had three stories, so each situation type was divided into four ratios of 0, 0.33, 0.67 and 1, in which 0 meant that "F" was not selected, 0.33 meant that "F" was selected once, and 0.67 meant that "F" was selected twice. 1 means I picked "F" for three times.

As shown in Table 6, there was no significant difference in the results of moral judgments between the emotion-induced group and the emotion-induced group with cognitive resource occupation in the three types of situations.

Table 5: Number of people whose judgment result was "F" in the emotion-induced group and the emotion-induced with cognitive resource occupation group (n, %)

Dilemma types	Group	n ($F=0$)	n ($F=0.33$)	n ($F=0.67$)	n ($F=1$)
High personal involvement	Emotion-induced group	14 (22.6)	13 (21)	16 (25.8)	19 (30.6)
	Emotion-induced with cognitive resource occupation group	6 (9.7)	18 (29)	22 (35.5)	16 (25.8)
Low personal involvement	Emotion-induced group	4 (6.5)	2 (3.2)	20 (32.3)	36 (58.1)
	Emotion-induced with cognitive resource occupation group	1 (1.6)	3 (4.8)	14 (22.6)	44 (71)
Non-personal involvement	Emotion-induced group	18 (29)	27 (43.5)	5 (8.1)	12 (19.4)
	Emotion-induced with cognitive resource occupation group	28 (45.2)	15 (24.2)	9 (14.5)	10 (16.1)

Table 6: Differences in moral judgment results between the emotion-induced group and the emotion-induced group with cognitive resource occupation

Dilemma types	Group	X^2	P
High personal involvement	Emotion-induced group	5.211	0.157
	Emotion-induced with cognitive resource occupation group		
Low personal involvement	Emotion-induced group	3.859	0.277
	Emotion-induced with cognitive resource occupation group		
Non-personal involvement	Emotion-induced group	6.927	0.074
	Emotion-induced with cognitive resource occupation group		

3.3 Comparison of Results between Experiment 1 and Experiment 2

Because the cognitive control in Experiment 1 and the emotional induction in Experiment 2 were only different in emotional processing, the difference of moral judgment between the cognitive resource occupancy group and the emotional elicitation and cognitive resource occupancy group could explain the influence of emotional elicitation on the moral judgment of college students when the cognitive resource was occupied. The difference of moral judgment between the non-occupancy group and the emotion-eliciting group shows the influence of emotion-eliciting on the moral judgment of college students when there is no occupancy of cognitive resources.

3.3.1 Differences between the Cognitive Resource Occupancy Group and the Emotion-Induced Cognitive Resource Occupancy Group

Differences in response time between the cognitive resource occupancy group and the emotion-induced and cognitive resource occupancy group

The *t*-test of the cognitive resource occupancy group and the emotion-evoked cognitive resource occupancy group was carried out in the three types of dilemmas (Table 7). It was found that in the three situations of high personal involvement, low personal involvement and non-personal involvement, there were no significant differences in the reaction time between the two groups.

Table 7: Differences in response time between the cognitive resource occupancy group and the emotion-induced with cognitive resource occupancy group

Dilemma types	Group	*M*	*SD*	*t*	*P*
High personal involvement	Cognitive resource occupancy group	42058.457	21220.328	−0.381	0.704
	Emotion-induced with cognitive resource occupancy group	43553.339	22458.757		
Low personal involvement	Cognitive resource occupancy group	24020.973	13462.956	−0.517	0.606
	Emotion-induced with cognitive resource occupancy group	25432.323	16755.790		
Non-personal involvement	Cognitive resource occupancy group	23284.188	13049.689	−1.211	0.228
	Emotion-induced with cognitive resource occupancy group	26344.507	15017.637		

Differences in moral judgment results between the cognitive resource occupancy group and the emotion-induced cognitive resource occupancy group

Tables 8 and 9 showed that in the low personal involvement situation, the number of people in the cognitive resource occupancy group whose moral judgment was "Yes" was significantly higher than that in the emotion-induced cognitive resource occupancy group, and there was no significant difference in the results of moral judgment in the other two situations.

Table 8: Number of people whose moral judgment result was "F" in the cognitive resource occupancy group and the emotion-eliciting group (n, %)

Dilemma types	Group	n ($F = 0$)	n ($F = 0.33$)	n ($F = 0.67$)	n ($F = 1$)
High personal involvement	Cognitive resource occupancy group	5 (8.1)	17 (27.4)	22 (35.5)	18 (29)
	Emotion-induced with cognitive resource occupancy group	6 (9.7)	18 (29)	22 (35.5)	16 (25.8)
Low personal involvement	Cognitive resource occupancy group	4 (6.5)	0 (0)	27 (43.5)	31 (50)
	Emotion-induced with cognitive resource occupancy group	1 (1.6)	3 (4.8)	14 (22.6)	44 (71)
Non-personal involvement	Cognitive resource occupancy group	24 (38.7)	19 (30.6)	9 (14.5)	10 (16.1)
	Emotion-induced with cognitive resource occupancy group	28 (45.2)	15 (24.2)	9 (14.5)	10 (16.1)

3.3.2 Differences between the Non-Occupying Cognitive Resources Group and the Emotion-Induced Group

Differences in response time between the non-occupied cognitive resources group and the emotion-induced group

t-test was performed on responses of the non-occupying cognitive resources and the emotion-eliciting group in the three types of dilemmas (Table 10). The results showed that the response time of the emotion-induced group was significantly higher than that of the non-occupied cognitive resource group in all three situations.

Table 9: Differences in moral judgment results between the cognitive resource occupancy group and the emotion-induced cognitive resource occupancy group

Dilemma types	Group	X^2	*P*
High personal involvement	Cognitive resource occupancy group	0.237	0.971
	Emotion-induced with cognitive resource occupancy group		
Low personal involvement	Cognitive resource occupancy group	11.175*	0.011
	Emotion-induced with cognitive resource occupancy group		
Non-personal involvement	Cognitive resource occupancy group	0.778	0.855
	Emotion-induced with cognitive resource occupancy group		

Table 10: Response time difference between the non-occupying cognitive resources group and the emotion-induced group

Dilemma types	Group	*M*	*SD*	*t*	*P*
High personal involvement	Non-occupying cognitive resources group	31294.500	16434.988	−3.197**	0.002
	Emotion-induced group	43249.408	24431.643		
Low personal involvement	Non-occupying cognitive resources group	20639.710	11396.836	−2.187*	0.031
	Emotion-induced group	25480.242	13182.861		
Non-personal involvement	Non-occupying cognitive resources group	20489.489	11219.537	−2.220*	0.028
	Emotion-induced group	25377.548	13221.628		

Differences in moral judgment results between the non-occupying cognitive resources group and the emotion-induced group

Tables 11 and 12 showed that there was no significant difference in the results of moral judgments between the non-occupancy group and the emotion-induced group in the three dilemma situations.

Table 11: Number of people whose moral judgment result was "F" in the non-occupying cognitive resources group and the emotion-induced group

Dilemma types	Group	n ($F = 0$)	n ($F = 0.33$)	n ($F = 0.67$)	n ($F = 1$)
High personal involvement	Non-occupying cognitive resources group	11 (17.7)	14 (22.6)	18 (29)	19 (30.6)
	Emotion-induced group	14 (22.6)	13 (21)	16 (25.8)	19 (30.6)
Low personal involvement	Non-occupying cognitive resources group	3 (4.8)	3 (4.8)	27 (43.5)	29 (46.8)
	Emotion-induced group	4 (6.5)	2 (3.2)	20 (32.3)	36 (58.1)
Non-personal involvement	Non-occupying cognitive resources group	16 (25.8)	21 (33.9)	14 (22.6)	11 (17.7)
	Emotion-induced group	18 (29)	27 (43.5)	5 (8.1)	12 (19.4)

Table 12: Differences in moral judgment results between the non-occupancy group and the emotion-induced group

Dilemma types	Group	X^2	P
High personal involvement	Non-occupying cognitive resources group	0.515	0.916
	Emotion-induced group		
Low personal involvement	Non-occupying cognitive resources group	2.139	0.544
	Emotion-induced group		
Non-personal involvement	Non-occupying cognitive resources group	5.174	0.159
	Emotion-induced group		

4 Discussion

4.1 Discussion of Experiment 1

Experiment 1 found that in the context of high personal involvement in the degree of the reaction time of cognitive resources occupation group was significantly higher than cognitive resources occupy group, indicating that this kind of situation cognitive resources in response to the moral judgment has a significant impact. When college students in the face of such with their own vital interests are closely related to high personal involvement in the situation, because of the cognitive resources are occupied without sufficient cognitive resources to reason, emotional intuitionistic factors take the upper hand in the judgment process, resulting in more emotional conflict. Therefore, it is difficult to make moral judgments and more time is needed to make judgments, which is in line with the view of social intuitive model theory. From the perspective of "Yes" and "No" of moral judgment results, this study showed that whether cognitive resources were occupied had no significant influence on "Yes" and "No" of moral judgment, which is consistent with previous research results. Huang et al. [9] found that when subjects made moral judgments, increasing the cognitive load of moral judgment did not affect the moral judgment of the subjects. Therefore, college students will make the same moral judgment in the same dilemma regardless of the cognitive resource occupation or non-occupation.

4.2 Discussion of Experiment 2

The results of Experiment 2 showed that after emotional induction, no matter whether cognitive resources were occupied or not, there was no significant influence on the response time of college students' moral judgments. This was because although emotion was induced in the experiment, the effect of emotion on the response time of moral judgments was far greater than that of cognition. So even though cognitive resources are tied up and they cannot use more cognitive resources to reason, they can rely more on intuition and emotions to make moral judgments.

From moral judgment results "Yes" and "No", although this experiment have emotions evoked, consistent with the results of Experiment 1, college students in low personal involvement situations have more "Yes" judgments; In the situation of individual participation, college students have a more "No", indicating that even if the mood are induced, the moral judgment of college students is more influenced by cognition and reflects more utilitarian tendency in this situation of low personal involvement. This may be due to some characteristics of college students themselves, such as college students have better emotional regulation ability, higher cognitive level and good moral accomplishment.

4.3 Comparison between Experiment 1 and Experiment 2

4.3.1 Comparison Between the Cognitive Resource Occupancy Group and the Emotion-Induced Cognitive Resource Occupancy Group

The comparison of response time between the cognitive resource occupation group and emotion-induced cognitive resource occupation group showed that the emotional evocation has no significant effect on the response time of college students' moral judgments under the condition of cognitive resource occupation, which is consistent with previous research results. According to the double-processing theory, Greene et al. [10] believed that cognition and emotion may conflict with each other or cooperate with each other in moral judgment. Previous studies have found that when subjects make moral judgments, their emotional tendencies are consistent with their cognitive processing results, and they are able to make moral judgments faster. However, the increase of emotional factors and the decrease of cognitive factors do not necessarily significantly affect the duration of moral judgment [11].

The results of the study also found that when the cognitive resources are occupied, students' groups emotions evoked significantly affect their types in low involvement in situations of moral judgment as a result, the cognitive resources occupation group than emotion-induced with cognitive resources occupy a more "Yes" judgment, indicating that they weigh more in terms of outcomes, use cognitive reasoning to make moral judgments, and make judgments that are in the interest of the majority. This is because the low degree of personal involvement in situations of this kind of had a little effect on individual cognitive resources utilization reduces the feeling of the strength of individual emotions, and emotional induced just increase the influence of emotion in moral judgments, it conforms to the theory of cognitive resources are limited. It is believed that when an individual's additional cognitive load tasks occupy available cognitive resources, the individual's feelings of emotional intensity will be reduced [12].

4.3.2 Comparison between the Non-Occupying Cognitive Resources Group and the Emotion-Induced Group

The results showed that the response time of moral judgment increased significantly when the cognitive resources were not occupied and the emotion is induced, especially in the situation of high personal involvement. When emotion is involved in moral judgment, there will be more emotional factors involved in the moral judgment process of college students, and the conflict between emotion and cognition will be more intense, so the subjects need more time to make judgment. Especially when faced with the situation related to the vital interests of the subjects, it will stimulate more emotional factors, thus aggravating the conflict between cognition and emotion. And further lengthen the time for moral judgment. In conclusion, under the condition of constant cognition, the involvement of emotion will cause college students to need more time to make moral judgments.

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