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# Advancing Moral Education for Undergraduate Students in Shanxi, China: Fostering Ethical Behavior

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## Abstract

**Purpose:** This research investigates the factors impacting moral behavior of undergraduate students in Shanxi, China. The conceptual framework encompasses ethics education, ethical awareness, moral reasoning, moral intent, moral judgment, and moral behavior. **Research design, data, and methodology:** The population and sample size are 500 undergraduate students in selected three universities in Shanxi, China who have experienced moral education. This study applied quantitative method to distribute questionnaire to collect the data. Sampling techniques were judgmental, quota, and convenience sampling. A pilot test was 50 participants were conducted. The validity was assessed using the item-objective congruence (IOC) index. The data analysis was applied by confirmatory factor analysis (CFA) and structural equation modeling (SEM) techniques. **Results:** While ethics education did not show a significant impact on ethical awareness, it positively influenced moral reasoning. Additionally, moral reasoning, ethical awareness, moral intent, moral judgment, and their interconnected dynamics significantly predicted moral behavior. This implies that individuals with advanced moral reasoning skills, heightened ethical awareness, and strong moral intent and judgment are more likely to engage in ethical behavior. **Conclusions:** These findings offer valuable insights for both educational practices and theoretical frameworks in understanding and fostering ethical development.

**Keywords:** Ethical Awareness, Moral Reasoning, Moral Judgment, Moral Behavior, Moral Education

**JEL Classification Code:** E44, F31, F37, G15

## 1. Introduction

Moral education refers to the intentional and systematic cultivation of moral values, ethical reasoning, and character development in individuals. It aims to promote the understanding of right and wrong, foster virtues such as honesty, integrity, empathy, and social responsibility, and guide individuals in making ethical decisions and taking responsible actions in various life situations (Walker & Thoma, 2017). Lapsley and Hill (2009) explored the intersection of moral development, self-concept, and identity formation. It presents various theoretical perspectives and empirical research on moral education, highlighting the relationship between moral reasoning, character formation, and personal identity.

The origins of moral discourse can be traced back to ancient Greece, with Aristotle's observations in *Nicomachean Ethics* highlighting the distinction between intellectual virtue and virtue of character. Aristotle posited that the latter is cultivated through habitual practice driven by people's pursuit of beauty and kindness (Ameriks & Clarke, 2000). Over the past two millennia, countless scholars and philosophers have drawn inspiration from Aristotle's work and provided extensive interpretations and explanations of morality and moral phenomena (Kristjánsson, 2006). In line with the theoretical framework of Aristotelian virtue ethics, this paper aims to categorize and review the development of moral education in K-12 and higher educational systems.

Moral education (Deyu) in China is “a kind of education

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that teaches more than just moral values; physical and mental health, political ideology, and courses in law are also the focus of Chinese moral education.” Moral or ethics education holds significant importance in China due to its profound impact on the development of individuals, communities, and society as a whole. As China undergoes rapid social, economic, and technological transformations, nurturing a strong ethical foundation becomes crucial for maintaining social harmony, promoting responsible citizenship, and fostering sustainable development (Tang & Wang, 2021).

The problem of this research is to identify and examine the factors that significantly influence the moral behavior of undergraduate students in Shangxi, China. Specifically, the study seeks to explore the impact of ethics education, ethical awareness, moral reasoning, moral intent, moral judgment, and moral behavior on the moral conduct of undergraduate students in Shangxi, China (Alnajjar & Abou Hashish, 2021). By understanding these factors and their interactions within the educational environment, the research aims to contribute to the existing body of knowledge and provide insights for educators, policymakers, and stakeholders to enhance moral education practices and promote ethical development among undergraduate students in Shangxi, China.

The findings of the study can contribute to the promotion of ethical decision-making among undergraduate students. By identifying the factors that shape moral reasoning, moral intent, and moral judgment, the study can assist in designing educational strategies that encourage students to make ethical choices and act in accordance with moral principles. Thus, this research aims to explore the key factors that contribute to the moral behavior of undergraduate students in Shangxi, China, and examine the relationships and interactions among these factors within the conceptual framework of ethics education, ethical awareness, moral reasoning, moral intent, moral judgment, and moral behavior.

## 2. Literature Review

### 2.1 Ethics Education

Ethics education refers to “the systematic instruction and guidance provided to individuals or students to develop their ethical understanding, values, and decision-making skills, which encompasses formal ethics courses, moral education programs, and ethical training initiatives implemented within educational institutions” (Haase et al., 2013). Ethics education has been a subject of significant interest and research in the field of education. Scholars have emphasized the importance of ethics education as a means to promote ethical awareness and decision-making skills among individuals (Richardson et al., 2005). Philosophical inquiry

involves engaging students in critical reflections on ethical dilemmas and ethical theories. This approach encourages students to analyze and evaluate moral arguments, fostering the development of ethical reasoning skills (Lipman, 2003).

Rossouw (2002) posited that moral awareness involves understanding the moral obligations and responsibilities associated with economic activities, as well as being aware of the moral issues and dilemmas likely to be encountered. Based on these definitions, this study conceptualizes ethical awareness as an individual's recognition of an ethical issue or dilemma that may give rise to a conflict with ethical standards and/or have adverse consequences for others. In the context of this study, moral reasoning is assessed by evaluating one's ability to analyze and assess various potential courses of action and their outcomes, considering ethical principles or decision rules (Ritter, 2006). Consequently, two hypotheses can be suggested:

**H1:** Ethics education has a significant impact on ethical awareness.

**H2:** Ethics education has a significant impact on moral reasoning.

### 2.2 Moral Reasoning

Moral reasoning refers to the cognitive process through which individuals analyze and evaluate ethical situations. It involves the application of ethical principles, values, and beliefs to make informed decisions about right and wrong (Lau, 2010). Moral reasoning involves the application of ethical theories and principles to real-world situations and dilemmas. Moral reasoning is closely linked to ethical decision-making. Individuals with advanced moral reasoning skills are more likely to consider ethical principles, engage in moral reflection, and make morally sound decisions (White et al., 2001). Moral reasoning enhances individuals' ability to navigate complex ethical dilemmas and evaluate the ethical implications of their actions (Killen & Dahl, 2021).

The literature provides substantial evidence to support the proposition that moral reasoning plays a significant role in shaping individuals' moral intent. Higher levels of moral reasoning are associated with greater commitment to ethical behavior, both at the individual and organizational levels (Richardson et al., 2005). Additional studies have investigated the impact of interventions aimed at promoting moral reasoning on moral behavior. For instance, Lapsley and Hill (2009) conducted a meta-analysis of moral education programs and found that interventions focused on enhancing moral reasoning had a positive effect on subsequent moral behavior. Thus, the researcher put forward below hypotheses:

**H3:** Moral reasoning has a significant impact on moral intent.

**H5:** Moral reasoning has a significant impact on moral behavior.

### 2.3 Ethical Awareness

Ethical awareness pertains to “an individual's recognition and understanding of ethical issues and dilemmas. It involves being conscious of the moral implications of one's actions and the potential impact on others” (Alnajjar & Abou Hashish, 2021). Milliken (2018) referred ethical awareness as “an individual's recognition and understanding of ethical issues, principles, and values in a given context. It involves an individual's ability to identify ethical implications and make informed ethical decisions.” Individual differences in personal values and beliefs can shape ethical awareness. Factors such as cultural background, religious beliefs, and personal experiences influence individuals' ethical perceptions and awareness of moral issues (Laczniak & Murphy, 2006). The organizational climate and culture significantly impact individuals' ethical awareness. Ethical leadership, ethical norms, and the presence of ethical codes and policies within organizations foster an environment that promotes ethical awareness (Treviño & Nelson, 2017).

Research by Treviño and Brown (2014) examined the impact of ethical awareness on employees' adherence to ethical standards within organizations. The findings revealed that employees who demonstrated higher levels of ethical awareness were more likely to engage in ethical behavior and were less prone to engaging in unethical conduct. Similarly, studies have shown that ethical awareness positively affects individuals' moral behavior in various contexts. For instance, in a study by Loe et al. (2000), it was found that ethical awareness among healthcare professionals was associated with a higher likelihood of adhering to ethical guidelines and providing quality care to patients. Therefore, this study hypothesizes that:

**H4:** Ethical awareness has a significant impact on moral behavior.

### 2.4 Moral Intent

According to Richardson et al. (2005) moral intent refers to “an individual's conscious commitment to act in accordance with moral principles and values. It reflects their genuine motivation to do what is morally right, even in challenging circumstances.” Conway and Kotera (2020) defined moral intent as the volitional aspect of moral decision-making, representing an individual's deliberate choice to behave in morally responsible ways. It encompasses the personal commitment to uphold ethical principles and the conscious effort to consider the moral

implications of one's actions. The behavior and actions of leaders have a substantial impact on the moral intent of their followers. Ethical leaders who demonstrate integrity, fairness, and transparency serve as role models and influence their followers' moral intent (Brown & Trevino, 2005).

Studies have demonstrated that individuals with a strong moral identity are more likely to exhibit moral intent and engage in ethical behaviors (Aquino & Reed, 2002; Aquino et al., 2007). Moreover, interventions aimed at promoting moral intent have been investigated. For example, studies have examined the effects of ethical training programs and moral reminders on individuals' moral intent and subsequent behavior, highlighting their potential to enhance ethical decision-making and actions (Reynolds, 2006; Tenbrunsel & Messick, 2004). Based on previous studies, this study assumes that:

**H6:** Moral intent has a significant impact on moral behavior.

### 2.5 Moral Judgment

Moral judgment relates to an individual's ability to assess the morality of a particular action or behavior. It involves making moral evaluations and distinguishing between right and wrong based on ethical considerations (Oswald & Mascarenhas, 2019). Moral judgment refers to the cognitive process through which individuals evaluate and make judgments about the moral rightness or wrongness of actions, intentions, or character traits (Haidt, 2001). It involves the application of moral principles, values, and social norms to assess and determine the ethical quality of various situations and behaviors. Individual differences in moral identity, the extent to which moral values are central to one's self-concept, influence moral judgment (Aquino & Reed, 2002). Those with a strong moral identity tend to prioritize moral considerations and exhibit more consistent and principled moral judgments.

Cultural and contextual factors have also been investigated in relation to moral judgment and behavior. Research has shown that cultural values and norms can shape individuals' moral judgments, with variations observed across different cultures (Nucci, 2001; Shweder et al., 2006). Additionally, situational factors, such as social influence and moral framing, can influence individuals' moral judgments and subsequent behaviors (Cialdini et al., 2004; Greene et al., 2001). Moreover, interventions aimed at enhancing moral judgment have been explored. Ethical education programs and interventions focusing on moral reasoning skills have shown promise in promoting moral judgment and ethical behavior among individuals (Lapsley & Carlo, 2014). Based on above discussions, this study indicated that:

**H7:** Moral judgment has a significant impact on moral behavior.

## 2.6 Moral Behavior

Moral behavior refers to “actions and conduct that align with accepted moral principles, values, and ethical standards” (Killen & Smetana, 2015). It involves behaving in ways that demonstrate respect, fairness, empathy, honesty, and responsibility towards others and the community (Richardson et al., 2005). Moral behavior encompasses the observable actions and conduct of individuals that align with ethical principles and standards. It represents the manifestation of one's moral values and the translation of moral intent into practice (Ellemers et al., 2019). Moral behavior is closely linked to moral reasoning, the cognitive process through which individuals evaluate ethical issues and make moral judgments (Jensen, 2020). Research has shown that as students' progress through different stages of moral reasoning, their moral behavior becomes more complex and sophisticated. Socialization within families, schools, and communities significantly influences the development of moral behavior in students (Grusec & Hastings, 2014). Parental modeling, peer interactions, and exposure to prosocial norms and values shape moral behavior through the transmission of moral values and the reinforcement of moral conduct.

## 3. Research Methods and Materials

### 3.1 Research Framework

The research model utilized in this study was created by integrating fundamental constructs derived from established theoretical frameworks. These constructs encompass ethics education, ethical awareness, moral reasoning, moral intent, moral judgment, and moral behavior. To formulate the conceptual framework, the study drew inspiration from research models proposed by Lau (2010), Richardson et al. (2005), Ellemers et al. (2019), and Namugenyi (2012). These models were specifically chosen for their valuable insights and contributions to comprehending the factors that influence the moral behavior of undergraduate students in Shangxi, China. By integrating these frameworks, the study aims to provide a comprehensive understanding of the complex dynamics associated with moral behavior in the specific context of undergraduate students in the region. The conceptual framework of this study is shown in Figure 1.

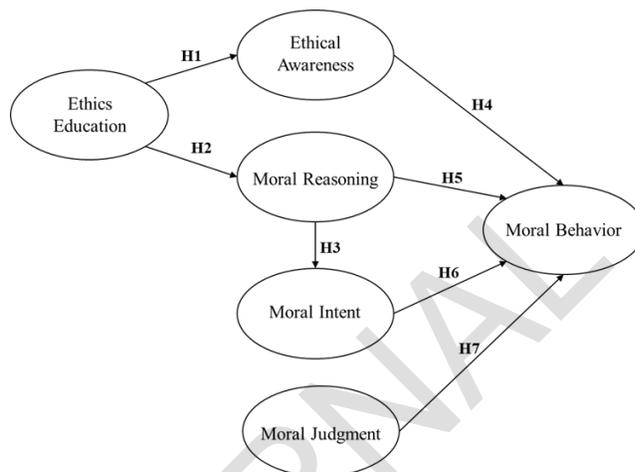


Figure 1: Conceptual Framework

**H1:** Ethics education has a significant impact on ethical awareness.

**H2:** Ethics education has a significant impact on moral reasoning.

**H3:** Moral reasoning has a significant impact on moral intent.

**H4:** Ethical awareness has a significant impact on moral behavior.

**H5:** Moral reasoning has a significant impact on moral behavior.

**H6:** Moral intent has a significant impact on moral behavior.

**H7:** Moral judgment has a significant impact on moral behavior.

### 3.2 Research Methodology

The study employs a quantitative research method and utilizes a questionnaire as the data collection instrument. Various sampling techniques are employed to select the participants, including judgmental, quota, and convenience sampling. These techniques allow for a diverse representation of undergraduate students in Shangxi, China who have been exposed to moral education.

To ensure the validity and reliability of the study, a pilot test is conducted prior to the main data collection. A small group of participants (e.g., 10-20) is to ensure that respondents can easily understand and complete the survey (Cronbach, 1951). The pilot test involves a sample of 50 participants who are representative of the target population. The validity of the study is assessed using the item-objective congruence (IOC) index, which examines the extent to which the questionnaire items align with the intended objectives of the study. The reliability of the study is measured using Cronbach's alpha, which assesses the internal consistency of the questionnaire items.

Higher IOC values indicate a stronger alignment between the individual items and the intended construct, suggesting that the items are valid and accurately measure the construct of interest. The results were in the accepted criterion for determining item-objective congruence is an IOC value of 0.5 or higher (Polit & Beck, 2017). A high Cronbach's alpha value indicates strong internal consistency, suggesting that the items are highly correlated and reliably measure the construct. This study presents the pilot test (n=50), with all constructs confirmed its reliability with a score over 0.7 (Tavakol & Dennick, 2011).

The collected data are analyzed using confirmatory factor analysis (CFA) and structural equation modeling (SEM) techniques. CFA is employed to assess the underlying factor structure and validity of the measured constructs, while SEM allows for testing the relationships and interactions among the identified factors impacting moral behavior.

### 3.3 Population and Sample Size

The selection of an appropriate target population is crucial for ensuring the relevance and applicability of research findings (Bryman, 2016). In this research, the target population is undergraduate students from three selected universities in Shangxi, China. This study applied online statistical software developed by Soper (2023), incorporates latent variables (6), observed variables (31), anticipated effect size (0.2), desired statistical power level (0.8), and the probability level (0.05), the minimum sample size required, as suggested by Soper (2023), is 403. However, to ensure efficient data analysis using Structural Equation Modeling (SEM), the researcher plans to collect a sample of 500 participants.

### 3.4 Sampling Technique

In non-probability sampling methods, sample size determination may rely on practical considerations, such as the availability of participants. Therefore, this research applied sampling techniques, incorporating judgmental, quota, and convenience sampling methods. Judgmental sampling is to select participants who are undergraduate students from three selected universities in Shangxi, China. This study employed quota sampling to calculate the subgroup of undergraduate students from three selected universities in Shangxi, China, as demonstrated in Table 1. Then, the researcher distributed online questionnaire via email and WeChat application to undergraduate students from three selected universities in Shangxi, China per convenience sampling.

**Table 1:** Sample Units and Sample Size

School	Sample Size
Shanxi Datong University	230
Shanxi University	150
Taiyuan University of Technology	120
<b>Total</b>	<b>500</b>

## 4. Results and Discussion

### 4.1 Demographic Information

According to Table 2, the demographical data represents a cohort of 500 undergraduate students from three selected universities in Shanxi, China, who have undergone moral education. The analysis provides insights into the gender and academic year distribution of the participants.

The sample consists of 46.4% male students and 53.6% female students. The gender distribution is relatively balanced, reflecting a diverse representation of both male and female students. The balanced gender distribution suggests that the study's findings and conclusions are likely to be applicable to both male and female undergraduate students, contributing to the generalizability of results.

The majority of participants are in their fourth year (39.0%), followed by the third year (24.8%), second year (22.4%), and first year (13.8%). This distribution provides a comprehensive representation of students across different stages of their undergraduate education. The distribution across academic years allows for a longitudinal analysis, enabling researchers to explore how moral education experiences may evolve or have varying impacts as students' progress through their academic journey.

**Table 2:** Demographic Profile

Demographic and General Data (N=500)		Frequency	Percentage
Gender	Male	232	46.4%
	Female	268	53.6%
Student Year	First Year	69	13.8%
	Second Year	112	22.4%
	Third Year	124	24.8%
	Fourth Year	195	39.0%

### 4.2 Confirmatory Factor Analysis (CFA)

In CFA, factor loadings surpassing the 0.50 threshold are deemed significant (Hair et al., 2006). These robust loadings imply the relevance and importance of the observed variables (items) in effectively measuring the intended latent constructs. Moreover, to affirm the statistical significance of these relationships, it is essential that the p-value associated with each factor loading falls below 0.05.

To ascertain the convergent validity of the constructs, researchers examine two pivotal statistics. Firstly, Composite Reliability (CR) should exceed the benchmark of 0.6, indicating satisfactory internal consistency and reliability within the latent constructs. Secondly, Average Variance Extracted (AVE) should surpass the 0.4 threshold. This underscores that the variance captured by the latent construct

through its indicators is substantial, providing justification for the existence of the construct (Fornell & Larcker, 1981). In Table 3, convergent validity is a crucial aspect of construct validation, ensuring that multiple measures designed to assess the same construct yield consistent and meaningful results.

**Table 3:** Confirmatory Factor Analysis Result, Composite Reliability (CR) and Average Variance Extracted (AVE)

Variables	Source of Questionnaire (Measurement Indicator)	No. of Item	Cronbach's Alpha	Factors Loading	CR	AVE
1. Ethics Education (EE)	Erzikova (2010)	5	0.862	0.664-0.806	0.863	0.559
2. Ethical Awareness (EA)	Kumolohadi et al. (2021)	5	0.923	0.79--0.875	0.924	0.710
3. Moral Reasoning (MR)	White et al. (2001)	4	0.793	0.687-0.710	0.793	0.489
4. Moral Intent (MI)	Richardson et al. (2005)	5	0.830	0.634-0.769	0.832	0.498
5. Moral Judgment (MJ)	Comunian (2002)	7	0.842	0.630-0.694	0.844	0.436
6. Moral Behavior (MB)	Richardson et al. (2005)	5	0.831	0.693-0.724	0.832	0.497

Table 4 presents statistical values obtained from the measurement model, indicating a satisfactory level of fit. Notably, the model displays favorable fit indices: CMIN/DF=1.646, GFI=0.919, AGFI=0.905, NFI=0.909, CFI=0.962, TLI=0.958, IFI=0.962, and RMSEA=0.036. These combined results affirm that the measurement model is well-aligned with the observed data, satisfying the criteria for an acceptable fit.

**Table 4:** Goodness of Fit for Measurement Model

Fit Index	Acceptable Criteria	Statistical Values
CMIN/DF	< 3.00 (Hair et al., 2006)	689.778/419 = 1.646
GFI	≥ 0.85 (Kline, 2011)	0.919
AGFI	≥ 0.85 (Kline, 2011)	0.905
NFI	≥ 0.85 (Kline, 2011)	0.909
CFI	≥ 0.85 (Kline, 2011)	0.962
TLI	≥ 0.85 (Kline, 2011)	0.958
IFI	≥ 0.85 (Kline, 2011)	0.962
RMSEA	≤ 0.08 (Hooper et al., 2008)	0.036
<b>Model Summary</b>		<b>Acceptable Model Fit</b>

**Remark:** CMIN/DF = The ratio of the chi-square value to degree of freedom, GFI = goodness-of-fit index, AGFI = adjusted goodness-of-fit index, NFI = normalized fit index, CFI = comparative fit index, TLI = Tucker-Lewis index, IFI = Incremental Fit Index, and RMSEA = root mean square error of approximation  
**Source:** Created by the author.

As illustrated in Table 5, this criterion compares the square root of the AVE (Average Variance Extracted) for each construct with the correlations between constructs. If the square root of AVE for each construct is higher than its correlation with other constructs, discriminant validity is supported (Fornell & Larcker, 1981). Convergent and discriminant validity have been demonstrated successfully. As a result, the available evidence is substantial, supporting the establishment of construct validity.

**Table 5:** Discriminant Validity

	MJ	EE	EA	MR	MI	MB
MJ	<b>0.660</b>					
EE	0.222	<b>0.748</b>				
EA	-0.222	-0.051	<b>0.843</b>			
MR	0.642	0.251	-0.236	<b>0.700</b>		
MI	0.650	0.207	-0.148	0.598	<b>0.706</b>	
MB	0.637	0.201	-0.061	0.531	0.556	<b>0.705</b>

**Note:** The diagonally listed value is the AVE square roots of the variables  
**Source:** Created by the author.

### 4.3 Structural Equation Model (SEM)

To assess the goodness of fit using various fit indices, such as chi-square, Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), and Root Mean Square Error of Approximation (RMSEA), Table 6 shows the accepted statistical results without the adjustment were CMIN/DF=2.324, GFI=0.894, AGFI=0.877, NFI=0.868, CFI=0.920, TLI=0.913, IFI=0.921, and RMSEA=0.052.

**Table 6:** Goodness of Fit for Structural Model

Fit Index	Acceptable Criteria	Statistical Values
CMIN/DF	< 3.00 (Hair et al., 2006)	992.541/427 = 2.324
GFI	≥ 0.85 (Kline, 2011)	0.894
AGFI	≥ 0.85 (Kline, 2011)	0.877
NFI	≥ 0.85 (Kline, 2011)	0.868
CFI	≥ 0.85 (Kline, 2011)	0.920
TLI	≥ 0.85 (Kline, 2011)	0.913
IFI	≥ 0.85 (Kline, 2011)	0.921
RMSEA	≤ 0.08 (Hooper et al., 2008)	0.052
<b>Model Summary</b>		<b>Acceptable Model Fit</b>

**Remark:** CMIN/DF = The ratio of the chi-square value to degree of freedom, GFI = goodness-of-fit index, AGFI = adjusted goodness-of-fit index, NFI = normalized fit index, CFI = comparative fit index, TLI = Tucker-Lewis index, IFI = Incremental Fit Index, and RMSEA = root mean square error of approximation  
**Source:** Constructed by author

### 4.4 Research Hypothesis Testing Result

Within the realm of statistical analysis, especially in the domain of structural equation modeling (SEM), the evaluation of hypotheses stands as a pivotal phase. It serves the purpose of ascertaining the validity of proposed connections between independent and dependent variables. In this study, the assessment of these relationships utilized statistical tools such as regression coefficients, standardized path coefficients, and t-values. The findings of this evaluation, as outlined in Table 7, substantiated the hypotheses, with statistical significance established at a level of  $p < 0.05$ .

**Table 7:** Hypothesis Results of the Structural Equation Modeling

Hypothesis	( $\beta$ )	t-Value	Result
H1: EE $\rightarrow$ EA	-0.058	-1.168	Not Supported
H2: EE $\rightarrow$ MR	0.266	4.849*	Supported
H3: MR $\rightarrow$ MI	0.602	9.041*	Supported
H4: EA $\rightarrow$ MB	0.089	1.977*	Supported
H5: MR $\rightarrow$ MB	0.216	3.168*	Supported
H6: MI $\rightarrow$ MB	0.224	3.324*	Supported
H7: MJ $\rightarrow$ MB	0.444	7.696*	Supported

Note: \*= $p$ -value $<0.05$

Source: Created by the author

The conceptual framework of the study encompasses various dimensions, each representing a critical aspect of moral development. A series of hypotheses were formulated to investigate the relationships between these dimensions. To evaluate these hypotheses, the study employed standardized path coefficients, t-values, and a significance level set at  $p < 0.05$ .

Ethics Education and Ethical Awareness (H1):

The results suggest that the impact of ethics education on ethical awareness is not statistically significant ( $\beta = -0.058$ ,  $t = -1.168$ ,  $p > 0.05$ ). This implies that, contrary to expectations, ethics education does not significantly contribute to heightened ethical awareness among the students.

Ethics Education and Moral Reasoning (H2):

On the other hand, there is strong support for the hypothesis that ethics education positively impacts moral reasoning ( $\beta = 0.266$ ,  $t = 4.849^*$ ,  $p < 0.05$ ). The substantial t-value signifies the significant role of ethics education in fostering more robust moral reasoning among students.

Moral Reasoning and Moral Intent (H3):

The findings strongly support the notion that moral reasoning significantly influences moral intent ( $\beta = 0.602$ ,  $t = 9.041^*$ ,  $p < 0.05$ ), with a notably high t-value confirming the positive impact of enhanced moral reasoning on the formulation of moral intent.

Ethical Awareness and Moral Behavior (H4):

Ethical awareness emerges as a significant predictor of moral behavior ( $\beta = 0.089$ ,  $t = 1.977^*$ ,  $p < 0.05$ ). This

highlights the importance of heightened ethical awareness in shaping moral conduct.

Moral Reasoning and Moral Behavior (H5):

The hypothesis positing the positive impact of moral reasoning on moral behavior garners robust support ( $\beta = 0.216$ ,  $t = 3.168^*$ ,  $p < 0.05$ ). The substantial t-value reinforces the idea that refined moral reasoning contributes significantly to moral behavior.

Moral Intent and Moral Behavior (H6):

The results affirm the hypothesis that moral intent positively influences moral behavior ( $\beta = 0.224$ ,  $t = 3.324^*$ ,  $p < 0.05$ ). The noteworthy t-value underscores the considerable impact of moral intent on shaping actual moral conduct.

Moral Judgment and Moral Behavior (H7):

Strong support is found for the hypothesis suggesting that moral judgment significantly influences moral behavior ( $\beta = 0.444$ ,  $t = 7.696^*$ ,  $p < 0.05$ ). The considerable t-value attests to the pivotal role of moral judgment in guiding ethical actions.

In conclusion, this study offers valuable insights into the factors shaping the moral behavior of undergraduate students in Shangxi, China. While the impact of ethics education on ethical awareness remains inconclusive, the positive influence of moral reasoning, intent, judgment, and ethical awareness on moral behavior is unmistakable. These findings contribute to the broader understanding of moral development within the educational context and provide implications for educators and policymakers aiming to foster ethical behavior among students. Further research may delve into the nuanced dynamics of ethics education, tailoring interventions to enhance ethical awareness effectively.

## 5. Conclusion, Recommendation & Limitation

### 5.1 Conclusion and Discussion

The results of our study shed light on the intricate factors that contribute to the moral behavior of undergraduate students in Shangxi, China. Through a comprehensive examination of the hypotheses, we discern valuable insights into the interplay of ethics education, ethical awareness, moral reasoning, moral intent, moral judgment, and moral behavior.

The unexpected finding that ethics education does not significantly impact ethical awareness raises questions about the effectiveness of traditional educational approaches in enhancing students' awareness of ethical issues. It prompts a reevaluation of pedagogical methods within the Chinese educational context, suggesting that alternative strategies may be necessary to better instill ethical sensitivity among students.

The strong positive impact of ethics education on moral reasoning aligns with the premise that exposure to ethical principles and dilemmas can enhance students' ability to reason morally. This result emphasizes the pivotal role of educational programs in fostering critical thinking skills and ethical decision-making capabilities.

The robust support for the hypothesis that moral reasoning significantly influences moral intent underscores the importance of cultivating a strong foundation of ethical reasoning in the development of individuals' intentions to act morally. It emphasizes the cascading effect of educational interventions on shaping students' ethical mindset.

The finding that ethical awareness significantly impacts moral behavior reinforces the idea that being attuned to ethical considerations is a precursor to ethical action. This aligns with the theoretical perspective that heightened awareness of ethical implications guides individuals towards morally upright behavior.

The positive impacts of moral reasoning, moral intent, moral judgment, and ethical awareness on moral behavior collectively point to the interdependence of these components in shaping the ethical conduct of undergraduate students. This suggests that a holistic approach to moral education, encompassing various dimensions, may be more effective in cultivating ethical behavior.

These findings have profound implications for educational practices in Shangxi, China, and potentially beyond. Policymakers and educators may need to reconsider the content and methodologies of ethics education programs, ensuring a balanced emphasis on moral reasoning, ethical awareness, and the practical application of ethical principles in real-life situations.

While our study provides valuable insights, it is essential to acknowledge its limitations. The cross-sectional nature of the study restricts our ability to establish causation definitively. Future research may consider longitudinal designs to capture the dynamics of moral development over time. Additionally, qualitative methods could enrich our understanding by exploring the subjective experiences of students in moral education programs.

In conclusion, our study contributes to the ongoing discourse on moral development among undergraduate students in Shangxi, China. By unraveling the nuanced relationships between various dimensions of morality, we provide a foundation for refining educational strategies aimed at cultivating ethical behavior. The results prompt a reevaluation of current practices and encourage a more nuanced and integrated approach to moral education within the Chinese higher education system.

## 5.2 Recommendation

Based on the findings and implications of the study, the following recommendations are proposed to educational institutions, administrators, and policymakers aiming to foster ethical development among undergraduate students in Shangxi, China:

### 1. Review and Revise Ethics Education Programs:

Conduct a thorough review of existing ethics education programs, considering the study's findings. Assess the content, delivery methods, and overall effectiveness of these programs. Revise curricula to ensure a balanced emphasis on ethical reasoning, ethical awareness, and the practical application of ethical principles.

### 2. Integrate Moral Reasoning Across Disciplines:

Encourage faculty members to integrate moral reasoning exercises into various academic disciplines. Collaborate across departments to develop interdisciplinary approaches that embed ethical considerations in coursework. This approach helps students relate ethical principles to their specific fields of study.

### 3. Develop Case Studies and Ethical Dilemmas:

Create a repository of real-life case studies and ethical dilemmas relevant to different academic disciplines. Integrate these materials into coursework to provide students with opportunities to analyze, discuss, and resolve complex ethical scenarios. This practical approach enhances moral judgment and decision-making skills.

### 4. Implement Experiential Learning Opportunities:

Introduce experiential learning opportunities, such as community service projects, internships, or simulated ethical dilemmas. These experiences allow students to apply theoretical knowledge in real-world contexts, fostering ethical awareness and a deeper understanding of the implications of their decisions.

### 5. Strengthen Character Education Initiatives:

Emphasize character education initiatives that focus on moral intent. Design programs that guide students in aligning their personal values with intentional ethical actions. Incorporate self-reflection, goal-setting, and character-building activities to foster a sense of moral purpose.

### 6. Foster Collaboration with External Stakeholders:

Collaborate with external stakeholders, including industry professionals, community leaders, and ethical experts, to enhance ethical development initiatives. Invite guest speakers, organize panel discussions, and establish mentorship programs to expose students to diverse ethical perspectives and real-world applications.

### 7. Provide Professional Development for Educators:

Offer ongoing professional development opportunities for educators focused on ethical pedagogy. Provide training sessions, workshops, and resources to equip educators with effective strategies for promoting ethical development in

their students. Encourage a culture of continuous learning and improvement.

#### 8. Establish an Ethical Development Task Force:

Form a task force or committee dedicated to overseeing and advancing ethical development initiatives within the institution. This group can facilitate communication, coordinate efforts across departments, and ensure that ethical development remains a priority in the long term.

#### 9. Conduct Regular Assessments and Surveys:

Implement regular assessments and surveys to gauge the impact of ethical development initiatives on students. Collect feedback from students, faculty, and other stakeholders to measure effectiveness and identify areas for improvement. Use data-driven insights to adapt and refine ethical development practices.

#### 10. Promote a Holistic Approach to Ethical Development:

Advocate for a holistic approach to ethical development that recognizes the interconnectedness of moral dimensions. Encourage a comprehensive understanding of ethics that addresses cognitive, emotional, and behavioral aspects. Foster an environment that supports the integration of ethical principles into students' overall development.

By implementing these recommendations, educational institutions in Shangxi, China can create a conducive environment for ethical development, nurturing students who possess not only ethical knowledge but also the skills and values needed to navigate complex ethical challenges in their academic and professional lives.

### 5.3 Limitation and Further Study

While this study contributes valuable insights to the understanding of ethical development among undergraduate students in Shangxi, China, it is essential to acknowledge its limitations. These limitations highlight areas where further research could expand and enhance our understanding of the complexities involved in moral growth within the educational context.

The focus on Shangxi, China, limits the generalizability of the findings to other cultural and educational contexts. Further research should consider diverse settings to explore potential cultural variations in the factors influencing ethical development.

The study predominantly employs quantitative methods, potentially overlooking qualitative aspects that could provide richer insights into the subjective experiences and perceptions of students. Future research could employ mixed-methods approaches to incorporate qualitative perspectives.

While the study highlights the impact of ethics education, it does not delve deeply into the specific components or interventions within these programs that may contribute to ethical development. Further research could explore the

effectiveness of distinct educational strategies in promoting ethical growth.

Addressing these limitations in future research endeavors will contribute to a more comprehensive and nuanced understanding of ethical development within the higher education landscape. Each limitation presents an opportunity for researchers to refine methodologies, explore additional dimensions, and extend the scope of inquiry into the intricacies of moral growth.

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