Moral Reasoning of College-Educated Individuals from The United States in Relation to the Recent Sociopolitical Issues and with the Focus on Kohlberg's Theory of Moral Reasoning

Sehic Sandro¹ & Radeljas Dina²

Corr espondence: Sehic Sandro, Oneida-Herkimer-Madison BOCES, Distance Learning, 4747 Middle Settlement Rd., New Hartford, NY 13413, USA. Tel: 1-315-534-9262. E-mail: sehicsandro@gmail.com

Received: June 4, 2022 Accepted: July 2, 2022 Online Published: July 19, 2022 doi:10.5539/jedp.v12n2p64 URL: http://doi.org/10.5539/jedp.v12n2p64

Abstract

The aim of this quantitative research study was to explore the relationship and impact higher education has on moral reasoning in connection to recent events in United States. The sample size consisted of 137 participants from the United States who earned a Bachelor's, master's, or Doctoral degree and were over the age of 22. Participants were a diverse group including both genders and, different racial and socioeconomic statuses. The one-way ANOVA test suggested that statistically significant difference did not exist among the three different groups of participants, in relation to their moral reasoning on the recent events in the United States. The two-way MANOVA test suggested that statistically significant difference was found in one dependent variable.

Keywords: Moral reasoning, moral development, college education, public opinion.

1. Statement of the Problem

Today, most government officials in United States of America have some degree of higher education or experience. The same officials are responsible for current policies that shape the world of an everyday person in United States of America. Often, not enough thought is given to the development of moral reasoning in connection to higher education. Does higher education have an impact on moral reasoning and how does this translate to policy making and/or policy development? Moral reasoning is the very fabric of each human in our society and it is at the core of decision-making processes. Politicians are not immune to this development and more thought and research needs to be put forth on understanding how educational attainment intercepts or interacts with moral reasoning. Furthermore, what can current events tell us about this relationship and how it relates back to educational attainment.

2. Purpose of the Study

The purpose of this quantitative research study was to explore the relationship and impact higher education has on moral reasoning in connection to current events in United States. The findings of the study will fill a gap in literature and provide a deeper understanding of the human condition.

3. Theoretical Framework

The theoretical framework of this quantitative research study is Lawrence Kohlberg's theory of moral reasoning (Kohlberg, 1981, 1984). Lawrence Kohlberg (1981, 1984) argued in his theory of moral reasoning that individuals perceive morality at three levels and six stages:

Level 1 – Preconventional:

- Stage 1: Blind obedience to rules and authority, avoiding punishment ("If you break the law, you will go to jail").
- Stage 2: Self-interest, getting reward ("If you do not break the law then you will be honored as a good citizen").
- Level 2 Conventional:
- Stage 3: Interpersonal conformity ("Breaking the law is wrong because moral people do not do that").
- Stage 4: Maintaining social order ("Breaking the law is wrong because it violates societal norms").

¹ Oneida-Herkimer-Madison BOCES, New Hartford, NY, USA

² Mohawk Valley Community College, Utica, NY, USA

Level 3 – Postconventional:

Stage 5: Social contract, rules should be followed as long as they are justful. ("We need to do what is good regardless of what the law says. Therefore, obeying justful laws is okay, but it is also okay to break and ignore the laws that are unjust").

Stage 6: Universal ethical principles, laws should be universal for all humans. ("The law is supreme and I would not feel okay if I would break the law").

The participants' moral reasoning in relation to the given cases was determined by the three levels of moral reasoning formulated by Lawrence Kohlberg (1981, 1984).

4. Research Questions

RQ1: What is the relationship between level of education among college educated individuals in the United States and moral reasoning in relation to the George Floyd case?

RQ2: What is the relationship between level of education among college educated individuals in the United States and moral reasoning in relation to the Kyle Rittenhouse case?

RQ3: What is the relationship between level of education among college educated individuals in the United States and moral reasoning in relation to the COVID-19 vaccines case?

RQ4: What is the relationship between the degree of religiosity of highly educated individuals in the United States and moral reasoning in relation to the George Floyd case, Kyle Rittenhouse case, and COVID-19 vaccines case?

RQ5: What is the relationship between the gender of highly educated individuals in the United States and moral reasoning in relation to the George Floyd case, Kyle Rittenhouse case, and COVID-19 vaccines case?

RQ6: What is the relationship between the income of highly educated individuals in the United States and moral reasoning in relation to the George Floyd case, Kyle Rittenhouse case, and COVID-19 vaccines case?

RQ7: What is the relationship between the age of highly educated individuals in the United States and moral reasoning in relation to the George Floyd case, Kyle Rittenhouse case, and COVID-19 vaccines case?

RQ8: What is the relationship between the region of highly educated individuals in the United States and moral reasoning in relation to the George Floyd case, Kyle Rittenhouse case, and COVID-19 vaccines case?

RQ9: What is the relationship between the race of highly educated individuals in the United States and moral reasoning in relation to the George Floyd case, Kyle Rittenhouse case, and COVID-19 vaccines case?

Hypotheses:

H01: There is no relationship between level of education among college educated individuals in the United States and moral reasoning in relation to the George Floyd case, Kyle Rittenhouse case, and COVID-19 vaccines case?

HA1: There is a relationship between level of education among college educated individuals in the United States and moral reasoning in relation to the George Floyd case, Kyle Rittenhouse case, and COVID-19 vaccines case?

H02: There is no relationship between the degree of religiosity of highly educated individuals in the United States and moral reasoning in relation to the George Floyd case, Kyle Rittenhouse case, and COVID-19 vaccines case.

HA2: There is a relationship between the degree of religiosity of highly educated individuals in the United States and moral reasoning in relation to the George Floyd case, Kyle Rittenhouse case, and COVID-19 vaccines case.

H03: There is no relationship between the gender of highly educated individuals in the United States and moral reasoning in relation to the George Floyd case, Kyle Rittenhouse case, and COVID-19 vaccines case.

HA3: There is a relationship between the gender of highly educated individuals in the United States and moral reasoning in relation to the George Floyd case, Kyle Rittenhouse case, and COVID-19 vaccines case.

H04: There is no relationship between the income of highly educated individuals in the United States and moral reasoning in relation to the George Floyd case, Kyle Rittenhouse case, and COVID-19 vaccines case.

HA4: There is a relationship between the income of highly educated individuals in the United States and moral reasoning in relation to the George Floyd case, Kyle Rittenhouse case, and COVID-19 vaccines case.

H05: There is no relationship between the age of highly educated individuals in the United States and moral reasoning in relation to the George Floyd case, Kyle Rittenhouse case, and COVID-19 vaccines case.

HA5: There is a relationship between the age of highly educated individuals in the United States and moral reasoning in relation to the George Floyd case, Kyle Rittenhouse case, and COVID-19 vaccines case.

H06: There is no relationship between the region of highly educated individuals in the United States and moral

reasoning in relation to the George Floyd case, Kyle Rittenhouse case, and COVID-19 vaccines case.

HA6: There is a relationship between the region of highly educated individuals in the United States and moral reasoning in relation to the George Floyd case, Kyle Rittenhouse case, and COVID-19 vaccines case.

H07: There is no relationship between the race of highly educated individuals in the United States and moral reasoning in relation to the George Floyd case, Kyle Rittenhouse case, and COVID-19 vaccines case.

HA7: There is a relationship between the race of highly educated individuals in the United States and moral reasoning in relation to the George Floyd case, Kyle Rittenhouse case, and COVID-19 vaccines case.

5. Literature Review

When conducting a literature review on research topics relating to moral reasoning and moral development it is important to understand that moral reasoning and moral development are two different concepts. Moral development can be defined as the process of learning socially acceptable and unacceptable norms, mores, and the social rules regulated by the legal codes that usually occurs over lifetime or extended periods of time. Moral reasoning, on the other hand, is the way an individual or a group perceives what is socially acceptable and unacceptable. It can also be argued that moral reasoning is emotional interpretation of what is right and what is wrong usually affected by the situation. Narvaez (2019), states that individual differences affecting moral development and reasoning, vary by nationality and political orientation but only because certain values are endorsed. This does not mean that individuals will act upon them in every situation. Even if those two concepts are separate from one another, they are usually interdepend. From the aspects of social-learning theory and behaviorism, morality is learned throughout life in the process known as socialization. Socialization, as the process of learning social skills, is shaped by different social factors such as family, school, level of education, religion, peers, general society, social class, culture, significant others, etc. Based on the literature review of the previous research studies on moral development and moral reasoning, it could be argued that moral development is a complex social development that is shaped by different factors and that it relates to different factors studied under different science umbrellas and terms, including socialization, internationalization, interiorization, construction, maturation, etc. (Brugman et al., 2013). The literature review reveals abundant writing relating to moral development and moral reasoning. However, it is important to understand that cause-effect relationship between morality and moral development (dependent variables) and social and psychological factors (independent variables) has not been fully established.

One approach in studying moral development and moral reasoning is through ethnogenetic theory that uses evolutionary developmental perspective to explain moral development and moral reasoning (Narvaez, 2019). Further, Narvaez (2019) divides this approach into a two scale system with a vertical that aims to explain how an individual's life is shaped, and a horizontal that aims to explain how biological factors that may shape our moral development are inherited through the evolutionary process. Ethnogenetic theory rests on the Darwinian assumption that morality is not contrary to human nature but fundamental (Narvaez, 2019) and counters theories that argue that humans are naturally selfish. Darwinian approach to morality rests on the argument that moral characteristics such as empathy, social pleasure, concern for others and the community can be found not only in humans but also all other animals (Narvaez, 2019). An experimental research studies by Ben-Ami et al. (2011), Blystad et al. (2019), Sato et al. (2015) revealed results that rats can show empathy towards other rats that are trapped and are in some type of discomfort and that they are likely to share food with them supporting arguments that empathy and prosocial behavior have biological roots. Another insight into the hereditary nature of biological characteristics that shape morality is provided by Ramos et al. (2019), who suggest, that parenting is associated with character behavior among adolescence through heritable and environmental pathways. The same research study revealed results suggesting that parental negativity was associated with virtuous characters through heritable pathways but not environmental pathways whereas the parental positivity was associated with virtuous character through both heritable and environmental pathways (Ramos et al., 2019). The findings of Ramos et al. (2019) may also be in agreement with the argument presents by Dahl et al. (2011) that moral concerns are linked to emotions and emotional development that are also linked to parental encouragement during the early childhood.

The literature review on moral reasoning revealed a significant number of previously conducted research studies on moral reasoning among adolescents. Brugman et al. (2013) provided an abundant insight into research studies on moral reasoning of adolescence and at this point, it might be argued that moral reasoning in adulthood can be predicted by moral reasoning in adolescent age (Bacchini et al., 2013; Baffunno & Camodeca 2013; Lapsley & Carlo, 2014; Gummerum et al., 2012; Narvez et al., 2013; Stey et al., 2013). The research study by Bacchini et al. (2013) revealed results suggesting link between the exposure to community violence and deviant friends on one side and antisocial behavior on the other side. On the other hand, the research study by Bafunno and Camodeca (2013) examining the early development of shame and guilt revealed that older children expressed more quilt than

younger children, children were able to differentiate moral from non-moral situations, that shame was associated with difficult temperament and emotional problems, and that guilt was associated with adaptive characteristics. The research study by Carlo et al. (2013) revealed results suggesting that a higher level of prosocial moral reasoning positively relates to prosocial behavior and negatively with antisocial behavior among young and middle-age adolescents. A different study by Gummerum et al. (2012) revealed results suggesting that preschool children attribute positive emotions to a norm violator while older elementary-school children attribute negative emotions to a norm violator. Stey et al. (2013) revealed results suggesting that adolescents find physical harm worse than non-physical harm and harm by commission worse than harm by omission and Narvaez et al. (2013) reveals results suggesting that sociomoral development of empathy and conscience relates to maternal responsivity, playfulness, and frequent touching. In addition to the research studies reviewed by Brugman et al. (2013) that reveal findings suggesting that certain social factors relate to moral reasoning among adolescents such as the exposure to community violence and deviant friends on one side and antisocial behavior on the other side (Bacchini et al., 2013), and the maternal responsivity, playfulness, and frequent touching on one side and sociomoral development of empathy and conscience on the other side (Narvez et al., 2013).

Further literature review revealed research studies on how moral reasoning and moral development relate to adults (Dunlop et al., 2013; Pratt et al., 1996). Dunlop et al. (2013) conducted a research study on moral exemplars and why they engage in moral behavior. The results revealed that morality among the participants in this research study were motivated by both personal interest and interest in the welfare of others. Pratt et al. (1996) focused on the longitudinal study of how moral reasoning changes overtime among older adults (ages 64–80) and younger adults (35-54). The results suggest that moral reasoning stage level, as formulated by Lawrence Kohlberg, did not change for either group; however, older adults did show a significant decline over time in level of moral perspective.

The literature review also revealed research studies that aimed to explain the link between education and moral reasoning and development. Education, as a significant component of socialization process, is a significant factor that shapes one's moral development, and may affect moral reasoning later in life. However, the way education shapes one's moral development and moral reasoning is complex and deserves further research at both macro and micro levels.

Education at the elementary and secondary schools may have links with moral development (Lisnawati et al., 2020; Zulkifli et al., 2018). In both research studies (Lisnawati et al., 2020; Zulkifli et al., 2018), the role of the teachers is stressed as a crucial component in moral education. Lusnawati et al. (2020) argues that respect and responsibility are two crucial moral values that need to be taught in elementary schools and that moral education at the elementary school level can only be achieved in cooperation among families, schools, and society Zulkifli et al. (2018) stresses the significance of teachers' ability to promote moral reasoning and critical thinking at the secondary school level as the crucial step in moral development among secondary school students. In addition, Petrova-Gjorgjeva (2010) presents a research study that argues that implementation of civic education in schools and teaching rules and expectations of a civic society is a significant component of moral education and moral development of learners.

The literature review on moral development and reasoning and college education revealed research studies suggesting that moral development and moral reasoning among college students relate to different factors (Biggs & Barnett, 1981; Cesure & Topcu, 2010; Kieser et al., 2009; Mayhew et al., 2012; Nather, 2013). An older research study by Biggs and Barnett (1981) suggested that college freshmen with low moral reasoning scores had upper-level moral development and judgment strongly related to casual attribution and personal responsibility. Freshmen with high moral reasoning scores, the upper-division level of moral judgment development relates to the initial level of moral reasoning; and participation in extracurricular activities was negatively related to upper-division moral reasoning scores, meaning that higher participation in extracurricular activities related to lower upper-division moral reasoning. In a more recent study, Kieser et al. (2009) conducted research on undergraduate college students to obtain moral reasoning in relation to technological (computer) usage. Based on the Kohlberg's scale of moral reasoning most of the participants received scores that place them into Level 2 of moral reasoning that usually is present prior to the development of the "intellect." Most of the participants in the research study by Kieser et al. (2009) were undergraduate students and therefore, there is a possibility that the moral reasoning may change in the future once the students gain more education. Research study by Mayhew et al. (2012) explored how the first year of college influences moral reasoning of college students. The results from this study suggest that the moral developmental gains among students varied as a function of students' moral phases. The results of the research study by Mayhew et al. (2012) suggested that the first year of college may not be strong predictor of the moral reasoning among college students. In addition, a research study by Nather (2013) revealed results suggesting that moral reasoning of college students are at the conventional level (Level 2) and argues that education did not affect participants moral reasoning. Research studies by Kieser et al. (2009), Mayhew et al.

(2012) and Nather (2013) provide mixed results suggesting that moral reasoning of college students is at conventional level as defined by Kohlberg but the results do not suggest whether or not moral reasoning of college students is linked with the type of education they receive at their colleges or universities.

However, the literature review did not reveal a significant number of research studies that relate to the moral reasoning of college students in the United States in relation to their educational institution (public vs. parochial institutions) and their religious beliefs. Significant results were revealed by Cesur and Topçu (2010) who used Turkish version of defining issues test (DIT), a multiple-choice test designed to measure moral reasoning, to test moral reasoning of students who attend different universities in Turkey. The results revealed by Cesur and Topçu (2010) suggest strong relationship between students' schema scores and the universities they attend. They suggest that in the context of higher education and moral reasoning, moral reasoning can be linked with the educational atmosphere of the university or the higher educational institution. This is supported by previous research studies by Bebeau (2002), Gibbs et al. (2007), and King and Mayhew (2002) who found that the moral atmosphere of the institution can relate to individual's moral reasoning. In order to have better insight in how higher educational institutions such as colleges and universities relate to one's moral reasoning, it is necessary to conduct additional research studies that would provide insight on how education at the public and parochial institutions of higher education relates to moral reasoning of an individual. The literature review did not reveal research studies on that can provide additional, detailed, insight on how higher education and moral atmosphere at the institutions of high education relates to moral reasoning of an individual.

6. Methodology

6.1 Data Collection

The data in this quantitative research study were collected by an eight-item questionnaire survey with five nominal scale questions and three open-ended questions, through SurveyMoneky from October 18, 2021 to October 19, 2022. The eight-item questionnaire survey can be seen in Appendix A.

6.2 Population

The population in this study consisted of men and women, ages 22 and up from the United States, who have earned a bachelor degree, master's degree, or doctoral degree. As of 2019, approximately 94 million individuals in the United States have earned a minimum of bachelor degree according to U.S. Bureau of Census (2022), (n = 94 million).

6.3 Sample Size

Sample size consisted of 137 participants from the United States who earned bachelor, master's, or doctoral degree, ages 22 and over, of both genders, different racial and socioeconomic statuses as shown in Table 1.

Table 1. Descriptive Statistical Analysis: Participants' Education, Gender, Income, Age, Region, Race, and Religion

	Value label	N	Value label	N	
Education	Religion				
	Bachelor		Not at all important	29	
	degree	74	Not too important	12	
	Master's		Somewhat Important	32	
	degree	39	Important	15	
	Doctoral		Very important	41	
	degree	20	Undeclared	8	
	Undeclared	4			
Gender	Region				
	Male	58	North	97	
	Female	78	South	38	
	Undeclared	1	Undeclared	2	

Income	Age				
	0-9k	3	22-24	5	
	10-24k	8	25-34	33	
	25-49k	10	35-44	25	
	50-74k	27	45-54	25	
	75-99k	27	55-64	22	
	100-124k	22	65+	27	
	125-149k	8			
	150-174k	5			
	175-199k	6			
	200k+	7			
Race					
	White	93			
	Other than white	44			

6.4 Materials/Instruments

An eight-item questionnaire (Appendix A) was used to collect data in this quantitative research study. The questionnaire was administrated through SurveyMonkey, an online software tool designed for online surveys and data collection.

6.5 Data Analysis

The collected answers from the participants relating to the cases of George Floyd, Kyle Rittenhouse, and COVID-19, and their relation to moral reasoning as defined by Lawrence Kohlberg were evaluated and assigned points for each as follows: 1 point for preconventional level, 2 points for conventional level, and 3 points post conventional level. The collected data was analyzed by SPSS data analysis software. One-way ANOVA and two-way MANOVA tests were used was to analyze the collected data and to test null hypotheses. The statistical significance difference (Sig.) between the variables was used to answer the research questions and to determine whether to retain or reject the null hypotheses. A p-value of less than or equal to 5% (p \leq 0.05) indicated that the test is statistically significant and the null hypotheses were rejected, whereas the null hypotheses were retained for every research question where the p-value proved to be greater than 5% (p \geq 0.05).

7. Results

RQ1: What is the relationship between level of education among college educated individuals in the United States and moral reasoning in relation to the George Floyd case?

As indicated in Table 3, there was no statistically significant difference between groups as determined by the one-way ANOVA in relation to George Floyd case (F(2.282, 96.083) = [1.053], p = 0.371). Null hypothesis was retained.

Table 2. Descriptive Statistical Analysis: Moral Reasoning Scores in Relation to George Floyd Case by Level of Education

Education	N	Mean	SD
Bachelor degree	74	1.92	0.790
Master's degree	39	1.92	0.870
Doctoral degree	20	1.60	0.995
Undeclared	4	1.50	1.000
Total	137	1.86	0.850

Note. Four participants did not specify their level of education.

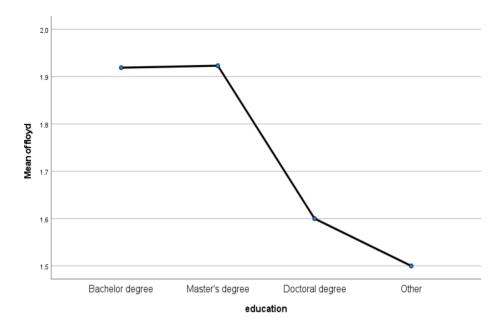


Figure 1. Distribution of means for George Floyd case

Table 3. One-Way ANOVA: Moral Reasoning in Relation to George Floyd Case by Level of Education

	Sum of Squares	df	Mean Square	F	Sig.	
Between groups	2.282	3	0.761	1.053	0.371	
Within groups	96.083	133	0.722			

Note. A p-value of less than 5% (p < 0.05) was used to determine statistically significant difference.

RQ2: What is the relationship between level of education among college educated individuals in the United States and moral reasoning in relation to the Kyle Rittenhouse case?

As indicated in Table 5, there was no statistically significant difference between groups as determined by the one-way ANOVA in relation to Kyle Rittenhouse case (F(6.057, 109.841) = [2.445], p = 0.067). Null hypothesis was retained.

Table 4. Descriptive Statistical Analysis: Moral Reasoning Scores in Relation to Kyle Rittenhouse Case by Level of Education

Education	N	Mean	SD	
Bachelor degree	74	1.74	0.908	
Master's degree	39	1.92	0.870	
Doctoral degree	20	1.30	0.979	
Undeclared	4	1.25	0.957	
Total	137	1.72	0.923	

Note. Four participants did not specify their level of education.

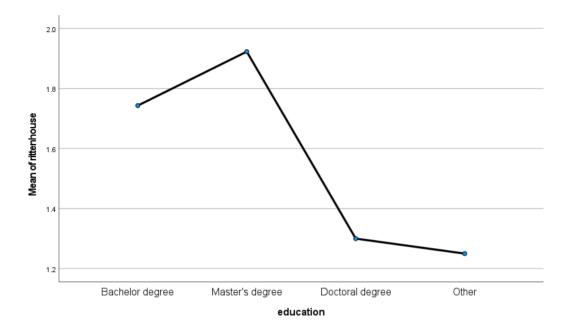


Figure 2. Distribution of means for Kyle Rittenhouse case

Table 5. One-Way ANOVA: Moral Reasoning in Relation to Kyle Rittenhouse Case by Level of Education

	Sum of Squares	df	Mean Square	F	Sig.
Between groups	6.057	3	2.019	2.445	0.067
Within groups	109.841	133	0.826		

Note. A p-value of less than 5% (p < 0.05) was used to determine statistically significant difference

RQ3: What is the relationship between level of education among college educated individuals in the United States and moral reasoning in relation to the COVID-19 vaccines case?

As indicated in Table 7, there was no statistically significant difference between groups as determined by the one-way ANOVA in relation to COVID-19 vaccines (F(2.556, 103.853) = [1.091], p = 0.355). Null hypothesis was retained.

Table 6. Descriptive Statistical Analysis: Moral Reasoning Scores in Relation to COVID-19 Vaccines Case by Level of Education

Education	N	Mean	SD
Bachelor degree	74	1.95	0.890
Master's degree	39	2.08	0.774
Doctoral degree	20	1.65	0.988
Undeclared	4	1.75	1.258
Total	137	1.93	0.885

Note. Four participants did not specify their level of education.

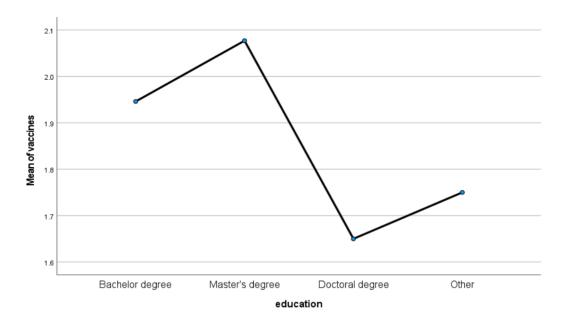


Figure 3. Distribution of means for COVID-19 vaccines case

Table 7. One-Way ANOVA: Moral Reasoning in Relation to COVID-19 Vaccines Case by Level of Education

	Sum of Squares	df	Mean Square	F	Sig.
Between groups	2.556	3	0.852	1.091	0.355
Within groups	103.853	133	0.781		

Note. A p-value of less than 5% (p < 0.05) was used to determine statistically significant difference.

RQ4: What is the relationship between the degree of religiosity of highly educated individuals in the United States and moral reasoning in relation to the George Floyd case, Kyle Rittenhouse case, and COVID-19 vaccines case? As indicated in Table 8, there was no statistically significant interaction effect between the level of education and religiosity on the combined dependent variables as determined by the two-way MANOVA, F = 0.867, p < 0.815; Wilks' $\Lambda = 0.788$. Null hypothesis was retained.

Table 8. Two-Way MANOVA: Religiosity of Highly Educated Individuals in the United States and Moral Reasoning in Relation to the George Floyd case, Kyle Rittenhouse case, and COVID-19 vaccines

Effect	Value	F	Hypothesis df	Error df	Sig.
education*religion	0.788	0.867	33.000	339.515	0.815

Note. A p-value of less than 5% (p < 0.05) was used to determine statistically significant difference.

RQ5: What is the relationship between the gender of highly educated individuals in the United States and moral reasoning in relation to the George Floyd case, Kyle Rittenhouse case, and COVID-19 vaccines case?

As indicated in Table 9, there was no statistically significant interaction effect between the level of education and gender on the combined dependent variables as determined by the two-way MANOVA, F = 1.489, p < 0.182; Wilks' $\Lambda = 0.933$. Null hypothesis was retained.

Table 9. Two-Way MANOVA: Gender of Highly Educated Individuals in the United States and Moral Reasoning in Relation to the George Floyd case, Kyle Rittenhouse case, and COVID-19 vaccines

Effect	Value	F	Hypothesis df	Error df	Sig.
education*gender	0.933	1.489	6.000	254.000	0.182

Note. A p-value of less than 5% (p < 0.05) was used to determine statistically significant difference.

RQ6: What is the relationship between the income of highly educated individuals in the United States and moral reasoning in relation to the George Floyd case, Kyle Rittenhouse case, and COVID-19 vaccines case?

As indicated in Table 10, there was statistically significant interaction effect between the level of education and income on the combined dependent variables as determined by the two-way MANOVA, F = 1.711, p > 0.002; Wilks' $\Lambda = 0.437$. Null hypothesis was not retained and alternative hypothesis was retained.

Table 10. Two-Way MANOVA: Income of Highly Educated Individuals in the United States and Moral Reasoning in Relation to the George Floyd case, Kyle Rittenhouse case, and COVID-19 vaccines

Effect	Value	F	Hypothesis df	Error df	Sig.	
education*income	0.437	1.711	57.000	304.957	0.002	

Note. A p-value of less than 5% (p < 0.05) was used to determine statistically significant difference.

RQ7: What is the relationship between the age of highly educated individuals in the United States and moral reasoning in relation to the George Floyd case, Kyle Rittenhouse case, and COVID-19 vaccines case?

As indicated in Table 11, there was no significant interaction effect between the level of education and age on the combined dependent variables as determined by the two-way MANOVA, F = 1.108, p < 0.318; Wilks' $\Lambda = 0.740$. Null hypothesis was retained.

Table 11. Two-Way MANOVA: Age of Highly Educated Individuals in the United States and Moral Reasoning in Relation to the George Floyd case, Kyle Rittenhouse case, and COVID-19 vaccines

Effect	Value	F	Hypothesis df	Error df	Sig.
education*age	0.740	1.108	33.000	339.515	0.318

Note. A p-value of less than 5% (p < 0.05) was used to determine statistically significant difference.

RQ8: What is the relationship between the region of highly educated individuals in the United States and moral reasoning in relation to the George Floyd case, Kyle Rittenhouse case, and COVID-19 vaccines case?

As indicated in Table 12, there was no significant interaction effect between the level of education and region on the combined dependent variables as determined by the two-way MANOVA, F = 1.324, p < 0.203; Wilks' $\Lambda = 0.883$. Null hypothesis was retained.

Table 12. Two-Way MANOVA: Region of Highly Educated Individuals in the United States and Moral Reasoning in Relation to the George Floyd case, Kyle Rittenhouse case, and COVID-19 vaccines

Effect	Value	F	Hypothesis df	Error df	Sig.
education*region	0.883	1.324	12.000	331.010	0.203

Note. A p-value of less than 5% (p < 0.05) was used to determine statistically significant difference.

RQ9: What is the relationship between the race of highly educated individuals in the United States and moral reasoning in relation to the George Floyd case, Kyle Rittenhouse case, and COVID-19 vaccines case?

As indicated in Table 13, there was no significant interaction effect between the level of education and race on the combined dependent variables as determined by the two-way MANOVA, F = 0.815, p < 0.603; Wilks' $\Lambda = 0.945$.

Null hypothesis was retained.

Table 13. Two-Way MANOVA: Race of Highly Educated Individuals in the United States and Moral Reasoning in Relation to the George Floyd case, Kyle Rittenhouse case, and COVID-19 vaccines

Effect	Value	F	Hypothesis df	Error df	Sig.
education*race	0.945	0.815	9.000	309.235	0.603

Note. A p-value of less than 5% (p < 0.05) was used to determine statistically significant difference

8. Discussion

The results suggest that participants in this quantitative research study revealed conventional moral reasoning in relation to all three cases. George Floyd case as seen in Table 2 ($\overline{x} = 1.86$); Kyle Rittenhouse case as seen in Table 4 ($\overline{x} = 1.72$), and COVID-19 vaccines case as seen in Table 6 ($\overline{x} = 1.93$). Therefore, it could be argued that highly educated individuals in the United States are more likely to reveal moral reasoning close to conventional level according to Lawrence Kohlberg's theory. The results also revealed no statistically significant difference between the means in all three cases. George Floyd case as seen in Table 3 (p < 0.371); Kyle Rittenhouse case as seen in Table 5 (p < 0.067); and COVID-19 vaccines case as seen in Table 7 (p < 0.355). The results also reveal that moral reasoning of the participants in this quantitative research study declined in reference to the level of education as can be seen in Figure 1 for George Floyd case, Figure 2 for Kyle Rittenhouse case, and Figure 3 for COVID-19 vaccines case.

In addition, two-way MANOVA tests were run in SPSS software to explore the relation between the level of education in combination with another dependent variable, including: degree of religiosity, gender, income, age, region, and race. As indicated in Table 10, there was statistically significant interaction effect between the level of education and income on the combined dependent variables as determine by two-way MANOVA, F = 1.711, p > 0.002; Wilks' $\Lambda = 0.437$. Null hypothesis was not retained and alternative hypothesis was retained. Statistically significant difference was not found in other dependent variables.

9. Limitations of the Study

This quantitative research study has two limitations that need to be taken into consideration that relate to its participants in this research study. The participants in this quantitative research study were individuals from the United States with higher education who were registered with SurveyMonkey. Therefore, individuals from other countries did not participate in this research study. In addition, the number of participants with bachelor degrees, master's degrees, and doctoral degrees was significantly different.

10. Recommendations for the Future Studies

In order to better understand the relationship between the level of education of the individuals with higher education and moral reasoning, it will be necessary to conduct additional research study, or studies, that would: a) include participants from other countries; b) include proportionally the same number of participants with bachelor degree, master's degree, and doctoral degree. In that way, academic community may have better understanding of the moral reasoning among highly educated individuals.

11. Conclusion

The purpose of this quantitative research study was to explore the relationship and impact higher education has on moral reasoning in connection to current events in United States. The participants in this research study were highly educated individuals from the United States who have earned bachelor degree, master's degree, or doctoral degree. Participants were asked to provide their opinion about the recent social issues in the United States that relate to George Floyd, Kyle Rittenhouse, and COVID-19 vaccines as seen in Appendix A. The collected answers from the participants were evaluated based on the moral reasoning theory formulated by Lawrence Kohlberg who argued that moral reasoning comes in three different levels, including preconventional level, conventional level, and post conventional level. The research results were analyzed by applying one-way ANOVA in SPSS system. The results suggest that participants in this quantitative research study revealed conventional moral reasoning in relation to all three cases. George Floyd case as seen in Table 2 ($\overline{x} = 1.86$); Kyle Rittenhouse case as seen in Table 4 ($\overline{x} = 1.72$), and COVID-19 vaccines case as seen in Table 6 ($\overline{x} = 1.93$). Therefore, it could be argued that highly educated individuals in the United States are more likely to reveal moral reasoning close to conventional level according to Lawrence Kohlberg's theory. The results also revealed no statistically significant difference between

the means in all three cases. George Floyd case as seen in Table 3 (p < 0.371); Kyle Rittenhouse case as seen in Table 5 (p < 0.067); and COVID-19 vaccines case as seen in Table 7 (p < 0.355). The results also reveal that moral reasoning of the participants in this quantitative research study declined in reference to the level of education as can be seen in Figure 1 for George Floyd case, Figure 2 for Kyle Rittenhouse case, and Figure 3 for COVID-19 vaccines case.

In addition, two-way MANOVA tests were run in SPSS software to explore the relation between the level of education in combination with another dependent variable, including: degree of religiosity, gender, income, age, region, and race. As indicated in Table 10, there was statistically significant interaction effect between the level of education and income on the combined dependent variables as determine by two-way MANOVA, F = 1.711, p > 0.002; Wilks' $\Lambda = 0.437$. Null hypothesis was not retained and alternative hypothesis was retained. Statistically significant difference was not found in other dependent variables. The recommendation for the future research studies that will build on this quantitative research study is to replicate this research study but to include more participants in order to obtain the new results that would provide better insight into the relationship between the level of education of highly educated individuals and the moral reasoning.

References

- Bacchini, D., Affuso, G., & De Angelis, G. (2013). Moral vs. non-moral attribution in adolescence: Environmental and behavioural correlates. *European Journal of Developmental Psychology*, 10(2), 221-228. https://doi.org/10.1080/17405629.2012.744744
- Bafunno, D., & Camodeca, M. (2013). Shame and guilt development in preschoolers: The role of context, audience and individual characteristics. *European Journal of Developmental Psychology*, 10(2), 128-143.
- Bebeau, J. M. (2002). The defining issues test and the four component model: Contributions to professional education. *Journal of Moral Education*, 31(3), 271-295. https://doi.org/10.1080/0305724022000008115
- Ben-Ami, Bartal, I., Decety, J., & Mason, P. (2011). Empathy and pro-social behavior in rats. Science, 334(6061), 1427-1430. https://doi.org/10.1126/science.1210789
- Biggs, D. A., & Barnett, R. (1981). Moral judgment development of college students. *Research in Higher Education*, 14, 91-102. https://doi.org/10.1007/BF00976287
- Blystad, M. H., Andersen, D., & Johansen, E. B. (2019). Female rats release a trapped cagemate following shaping of the door opening response: Opening latency when the restrainer was baited with food, was empty, or contained a cagemate. *PLoS ONE, 14*(10), e0223039. https://doi.org/10.1371/journal.pone.0223039
- Brugman, D., Keller, M., & Sokol, B. (2013). Introduction: Meaning, measurement, and correlates of moral development. *European Journal of Developmental Psychology*, 10(2), 99-105. https://doi.org/10.1080/17405629.2013.769368
- Cesur, S., & Topçu, M. S. (2010). A reliability and validity study of the Defining Issues Test: The relationship of age, education, gender and parental education with moral development. *Educational Sciences: Theory & Practice*, 10(3), 1681-1696. Retrieved from: Research study_A_Reliability_and_Validation_Study_of_th.pdf
- Dahl, A., Campos, J. J., & Witherington, D. C. (2011). Emotional action and communication in early moral development. *Emotional Review, 3*(2), 147-157. https://doi.org/10.1177/1754073910387948
- Dunlop, W. L., Walker, L. J., & Matsuba, K. (2013). The development of moral motivation across the adult lifespan. *European Journal of Development*, 10(2), 285-300. https://doi.org/10.1080/17405629.2012.746205
- Gibbs, J. C., Basinger, K. S., Grime, R. L., & Snarey, J. (2007). Moral judgment development across cultures: Revisiting Kohlberg's universality claims. *Developmental Review*, 27(4), 443-500. https://doi.org/10.1016/j.dr.2007.04.001
- Gummerum, M., Cribbett, C., Nicolau, A. N., & Uren, R. (2013). Counterfactual reasoning and moral emotion attribution. *European Journal of Developmental Psychology*, 10(2), 144-158. https://doi.org/10.1080/17405629.2012.756394
- Kieser, A. I. T., Morrison, E. E., & Craven, A. (2009). The application of Kohlberg's moral development model to the college students' technology ethics decisions. *Journal of College Teaching & Learning*, 6(5). 89-96. https://doi.org/10.19030/tlc.v6i5.1146
- King, P., & Mayhew, M. (2002). Moral judgement development in higher education: Insights from the defining issues test. *Journal of Moral Education*, *31*, 247-270. https://doi.org/10.1080/0305724022000008106
- Kohlberg, L. (1981). The philosophy of moral development: Moral stages and the idea of justice (Essay on moral

- development, Volume 1). Harper & Row: New York City, NY.
- Kohlberg, L. (1984). *The psychology of moral development: The nature and validity of moral stages* (Essays on moral development, Volume 2). Harper & Row: New York City, NY.
- Lapsley, D., & Carlo, G. (2014). Moral development at the crossroads: New trends and possible futures. *Developmental Psychology*, 50(1), 1-7. https://doi.org/10.1037/a0035225
- Lisnawati, R., Hasan, S., Rabani, L., Mansyur, M., & Suardika, I. K. (2020). The role of civic education in the student moral development in elementary school: A descriptive study. *Universal Journal of Educational Research*, 8(12), 6405-6414. https://doi.org/10.13189/ujer.2020.081206
- Mayhew, J. M., Seifert, T. A., Pascarella, E. T., Laird, T. F. L., & Blaich, C. F. (2012). Going deep into mechanisms of moral reasoning growth: How deep learning approaches affect moral reasoning development for first-year students. *Research in Higher Education*, 53(1), 26-46. Retrieved from: https://www.jstor.org/stable/413489
- Nather, F. (2013). Exploring the impact of formal education on the moral reasoning abilities of college students. *College Student Journal*, *47*(3), 470-477. Retrieved from: https://eric.ed.gov/?id=EJ1022611
- Narvaez, D. (2013). The future of research in moral development and education. *Journal of Moral Education*, 42(1), 1-10. https://doi.org/10.1080/03057240.2012.757102
- Narvaez, D. (2019). Moral development and moral values: Evolutionary and neurobiological influences. In D. P. McAdams, R. L. Shiner, & J. L. Tackett (Eds.), *Handbook of personality development*, 345-363. The Guilford Press. Retrieved from Research study_Moral_development_and_moral_values_Evolu.pdf
- Narvaez, D., Gleason, T., Wang, L., Brooks, J., Lefever, J. B., & Cheng, Y. (2013). Longitudinal effects of ancestral parenting practices on early childhood psychosocial outcomes. *Early Childhood Research Quarterly*. https://doi.org/10.1016/j.ecresq.2013.07.003
- Petrova-Gjorgjeva, E. (2010). Democratic society and moral education. *Procedia Social and Behavioral Sciences*, 2, 5635-5640. https://doi.org/10.1016/j.sbspro.2010.03.919
- Pratt, M. W., Diessner, R., Pratt, A., Hunsberger, B., & Pancer, S. M. (1996). Moral and social reasoning and perspective taking in later life: A longitudinal study. *Psychology and Aging, 11*(1), 66-73. https://doi.org/10.1037/0882-7974.11.1.66
- Ramos, A., Griffin, A. M., Neiderhiser, J. M., & Reiss, M. (2019). Did I inherit my moral compass? Examining socialization and evocative mechanisms for virtuous character development. *Behavioral Genetics*, 49, 175-186. https://doi.org/10.1007/s10519-018-09945-4
- Sato, N., Tan. L., Tate, K., & Okada, M. (2015). Rats demonstrate helping behavior toward a soaked conspecific. *Animal Cognition*, 18, 1039-1047. https://doi.org/10.1007/s10071-015-0872-2
- Stey, P. C., Lapsley, D., & McKeever, M. O. (2013). Moral judgement in adolescents: Age differences in applying and justifying three principles of harm. *European Journal of Developmental Psychology*, 10(2), 206-220. https://doi.org/10.1080/17405629.2013.765798
- U.S. Bureau of Census (April 18, 2022). Educational attainment. Retrieved from https://data.census.gov/cedsci/table?q=higher%20education&tid=ACSST1Y2019.S1501.
- Zulkifli, H., Razak, K. A., & Mahmood, M. R. (2018). The usage of ADDIE model in the development of philosophical inquiry approach in moral education module for secondary school students. *Creative Education*, 9, 2111-2124. https://doi.org/10.4236/ce.2018.914153

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/4.0/).