

Investigating Morality among Accounting Students across Gender

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Abstract

Previous studies have assessed the morality of accounting students in different countries. However, these studies have revealed different results. Besides, these studies have used different moral abilities of Rest's four components of morality to determine the morality of students. This study, therefore, determines the level of morality of accounting students, as well as examines the difference in morality among accounting students based on gender. Moral efficacy, moral meaningfulness and moral courage were used as indicators in determining the morality of students. Through the proportional stratified sampling technique, a sample of 250 accounting students was selected from a public university in Ghana to respond to a questionnaire. Mean, standard deviation, and Mann-Whitney U test were used to analyse the data. It was found that accounting students have a high level of morality. Also, it was revealed that there was no statistically significant difference between male and female accounting students' level of morality.

Keywords

Morality, Moral Efficacy, Moral Meaningfulness, Moral Courage, Accounting Students

1. Introduction

Morality defines the “right” and “wrong” ways to act, such as treating others fairly and not unfairly (Haidt & Kesebir, 2010). This is thought to be of importance in explaining the social behaviour of people who live together in groups (Gert, 2008). The idea that good people are capable of evil behaviours means, understanding morality requires looking past the causes of an individual's misbehaviour or defiance. For years, psychologists have been interested in morality

as a factor in sustaining social order because of Kohlberg's (1981) developmental inquiries (how do individuals acquire the ability to do this) and Rest (1986) clinical implications (what are the origins of social deviance and delinquency).

According to Rest (1983), morality is not a single variable but a process that constitutes an individual's level of moral behaviour, decision or action. These processes are summarized as follows: moral sensitivity (efficacy or awareness and interpretation), moral judgement (decision-making ability to distinguish between right and wrong), moral motivation (meaningfulness or prioritizing moral principles), and moral character (courage, tenacity and character strength). An individual who is being educated about ethics should begin or be able to demonstrate these moral skills at the end of the ethics education provided. Some scholars have investigated moral aspects, as suggested by Rest's component of moral development (Gammie & Gammie, 2009; Mahasneh, 2014; Taylor, 2013), to determine the level of morality of students. These researchers indicated low, medium and medium levels of morality among accounting students, respectively. Although these studies used one component of Rest's component of morality, other studies (May, Luth & Schwoerer, 2014; May & Luth, 2013) investigated the level of morality using more than one component of Rest's component of morality. These researchers suggested a medium level of morality among students.

Among the factors influencing morality, gender is one of the most investigated factors (Craft, 2013; Mahasneh, 2014). Gender disparities in morality (i.e., moral judgement, moral sensitivity, moral awareness and moral competence) have been researched in the accounting discipline (Ghazali, 2015; Gammie & Gammie, 2009; Mahasneh, 2014; Taylor, 2013). Mahasneh's (2014) study's finding indicated that females have a higher level of morality (using moral competence as a determinant) as compared to males. Gammie and Gammie's (2009) study findings indicated a statistically significant difference between female and male students in terms of morality (using moral awareness as a determinant). Female students showed a higher degree of morality (i.e., moral awareness) as compared to the males.

Moreover, other studies in the literature have shown different results. Taylor (2013) investigated the morality (using ethical sensitivity as a determinant) of accounting students based on gender in South Africa. It was found that gender was not statistically significant in influencing the morality of students; thus, there is no difference between female and male accounting students' morality (i.e., ethical sensitivity). Also, a study conducted by Ghazali (2015) investigated whether there is a significant relationship between morality (using ethical judgement as a determinant) and the gender of accountants based on ethics education received. The findings indicated no significant relationship between morality and the gender of accountants.

Boateng and Agyapong (2017) investigated morality (using ethical sensitivity as an indicator) among accounting students across genders in Ghana. Their findings suggested a moderate level of morality among accounting students. In terms of morality across gender, the study's finding indicated no significant dif-

ference between male and female accounting students. Although the study was carried out in Ghana, the study focused on only the sensitivity dimension of morality, leaving moral judgement, motivation and character. This study used more than one dimension of morality [i.e. moral efficacy (ME), moral meaningfulness (MM) and moral courage (MC)] to determine the level of morality among accounting students across genders.

1.1. Research Objectives

Two objectives were used to conduct the study. The study's objectives were to:

- 1) determine the level of morality (using ME, MM and MC).
- 2) examine the difference in morality among accounting students based on gender.

1.2. Research Significance

The outcome of this investigation would help reveal the level of morality among accounting students from a Ghanaian setting or perspective. Also, the study would contribute knowledge to the literature regarding the indicators used in determining the morality of students.

1.3. Scope and Limitation

The study used level 400 Bachelor of Education (Accounting) and Bachelor of Commerce (Accounting) students of the 2020/2021 academic year at the University of Cape Coast (UCC). This group of accounting students was chosen because they are taught and better informed about business ethics education in the accounting programme curriculum.

The study gathered data using close-ended questionnaires which did not provide the respondents the opportunity to fully express themselves than merely answering pre-determined questions. Findings from the study may not be appropriate to be generalised to other institutions aside from the UCC.

2. Literature Review

2.1. Rest's (1986) Four-Component Model of Morality

James Rest established the four-component model of morality to explain moral behaviour. According to Rest (1983), an individual must go through four psychological processes, to act morally in a given scenario. As a result of reviewing the literature, Rest derived the psychological processes of a morality model. The four stages were originally presented as a synthesis of moral psychology studies, followed by the development of a model that theorised psychological components underpinning every moral action (Narvaez & Rest, 1995; Rest, Bebeau & Volker, 1986). The model involves; moral sensitivity (awareness and interpretation), moral judgement (decision-making ability to distinguish between right and wrong), moral motivation (prioritising moral principles), and moral character (courage, tenacity and character strength).

According to Rest, “the production of moral behaviour in a particular situation involves 1) interpreting the situation in terms of how people’s welfare is affected by possible actions of the subject (moral sensitivity), 2) figuring out what the ideal moral course of action would be (moral judgment), 3) selecting among valued outcomes to intend to the moral course of action (moral motivation), and 4) executing and implementing what one intends to do (moral character)” (Rest, 1983: p. 559). Rest with his model of morality also suggested that moral decision-making is not a single process, and morality cannot be described as a single variable. Even though one process might interact and influence another process, and it is even possible to discover significant correlations between measures of the four processes, the four processes all serve different purposes.

In addition, these four components of the model denote the processes that the production of a moral action must go through hence, not universal individuals’ traits. The four components are not depicted as ideal person virtues, rather, the significant variables of study in tracing out how a certain course of action was arrived at in the context of a particular circumstance. Rest (1986), further recommends that an individual aiming to behave morally in a given situation must adhere to all the four psychological or component processes. One of the bases for the development of professional principles, morals and attitudes is Rest’s model (Al-Taweel, 2015). The relevance of Rest’s theory to the study is that it indicates the moral abilities or components that students who are being taught ethics education (i.e., Business ethics education) should possess. The theory also recommends the moral abilities that ethics education should seek to develop in students, which will aid them demonstrate ethical behaviours when confronted with ethical issues. According to Rest’s theory, when students’ moral abilities are developed through ethics education, their morality is developed as well.

2.2. Level of Morality among Students

Rest (1983), suggested that morality is not a single variable but process that constitute an individual’s level of moral behaviour, decision or action. These processes or aspects according to Rest, are summarized as; moral sensitivity (awareness and interpretation), moral judgement (decision-making ability to distinguish between right and wrong), moral motivation (prioritizing moral principles), and moral character (courage, tenacity and character strength). Some scholars have investigated moral aspects as suggested by Rest’s component of moral development (Saat, Porter, & Woodbine, 2010; Gammie & Gammie, 2009; Mahasneh, 2014; Taylor, 2013) to determine the level of morality of individuals. Saat et al. (2010), investigated the impact of ethics courses on Malaysian accounting students’ moral judgement. The research was conducted on accounting students in their 3rd year from six different universities in Malaysia, both before and after they took an ethics course. The sample included both schools that offer and those that do not offer an ethics course. The findings revealed that the level of morality (moral judgement) has improved for students

that study ethics course compared to those that do not study ethics course.

Also, [Mahasneh \(2014\)](#) investigated the level of morality (moral competence) among university undergraduate students. The findings showed an average level of improvement in morality among the students. Besides, [Gammie and Gammie \(2009\)](#) also, investigated the morality (moral awareness) between accounting and finance students, and students in other business programmes in Aberdeen Business School (United Kingdom). The findings indicated that accounting and finance students who were exposed to ethical educational initiatives do not show a high level of morality (moral awareness) than students in other business programmes. Additionally, [Taylor \(2013\)](#), investigated the influence of business ethics course on accounting students' moral sensitivity. The findings showed that the business ethics course was certainly beneficial in improving accounting students' level of morality (ethical sensitivity).

2.3. Morality among Students Based on Gender

[Haidt and Kesebir \(2010\)](#), suggested that the concept of morality specifies the "right" and "wrong" ways to act, such as, being fair and not unfair to others. It is proposed that gender differences exist due to differences in women's and men's ethical perspectives, henceforth, differences in moral ability ([Ritter, 2006](#)). Gender disparities in morality (i.e., moral judgement, moral sensitivity, moral awareness and moral competence) have been researched in the accounting discipline ([Ghazali, 2015](#); [Boateng & Agyapong, 2017](#); [Gammie & Gammie, 2009](#); [Mahasneh, 2014](#); [Taylor, 2013](#)). [Mahasneh's \(2014\)](#) study finding indicated that females have a high moral competence level as compared to males. [Gammie and Gammie's \(2009\)](#) study finding indicated a statistically significant difference between female and male students in terms of morality (moral awareness). Female students showed higher degree of morality (moral awareness) as compared to the males.

Furthermore, other studies in the literature have shown different results. [Taylor \(2013\)](#) investigated the ethical sensitivity of accounting students based on gender in South Africa. It was found that gender was not statistically significant in influencing the ethical sensitivity of students, thus, there is no difference between female and male accounting students' ethical sensitivity. Also, a study conducted by [Ghazali \(2015\)](#) investigated whether there is a significant relationship between ethical judgements and gender of accountants, based on ethics education received. The findings indicated no significant relationship between ethical judgement and gender of accountants. Moreover, [Boateng and Agyapong \(2017\)](#) investigated difference among gender and morality (ethical sensitivity) of accounting students. Level 400 accounting students from UCC were involved in the study. Two hundred participants were chosen for the study using a stratified and simple random sampling method. Finding of the study indicated no significant difference ($p = 0.14$, $p > 0.05$) between female and male accounting students' morality in terms of the mean value.

3. Methodology

Information on the research approach and design, population and sampling technique, data collection instrument, data collection procedure and data analysis are provided in this section.

3.1. Research Approach and Design

The study employed the quantitative research approach using the descriptive explanatory design to investigate morality among accounting students across genders. This approach allowed the researcher to gather data and analyse it using statistical description to explain the phenomenon or the issue under investigation (Apuke, 2017; Basias & Pollalis, 2018). The choice of this design is because it explains while providing additional information concerning the scope of the relationship between variables (Zikmund, Babin, Carr, & Griffin, 2012).

3.2. Population and Sampling Technique

The population of the study was 370 level 400 undergraduate accounting students pursuing Bachelor of Education (Accounting) and Bachelor of Commerce (Accounting) from the University of Cape Coast. B.Ed (Accounting) consists of 105 students (80 males and 25 females), whereas BCom (Accounting) consists of 265 students (176 males and 89 females). The population chosen was appropriate for the study because, at that level, accounting students have been exposed to most, if not all, courses embedded with ethics education in the accounting programme curriculum. Also, at that level, accounting students are better informed about ethics in the accounting profession. Out of 370 undergraduate accounting students, 193 of them were selected as the study's sample size.

The sample size was ascertained using Yamane's (1967) sample determination formula: $n = N/[1 + N(e)^2]$ where; n = sample size, N = population size and e = margin of error (5%). The choice of this sampling formula was because it makes available the opportunity for a researcher to satisfy the condition of sampling $\{[n > 50 + 8 \text{ (Number of independent variables)}]\}$ projected for regression analysis in social science research (Pallant, 2005). The researchers also included 57 respondents, resulting in a total sample size of 250. The reason for the inclusion of additional respondents was to ensure, the sample's representativeness of the population is unaffected by questionnaires' return rate.

Also, accounting students were divided into two groups based on gender according to the programmes they were enrolled in. The sample size for each stratum was determined using a proportional stratified sampling technique because it allows all individuals or characteristics of the population the same chances of participating in the research (Robertson & Sibley, 2018; Sharma, 2017). Lastly, a simple random sampling technique was used to select accounting students from each stratum of the programmes to participate in the study. Proportional stratified sampling of the respondents is presented in **Table 1**.

Table 1. Sample distribution of respondents.

Gender (stratum)	Bachelor of Education (Accounting)	Bachelor of Commerce (Accounting)	Total population (stratum)	Sample (<i>n</i>)	Total sample (<i>n</i>)
Male	80	176	256	54 + 119	173
Female	25	89	114	17 + 60	77
Total	105	265	370	71 + 179	250

Source: Fieldwork by the Frimpong and Omane-Adjekum.

3.3. Data Collection Instrument

The questionnaire was closed-ended questions. A five-point Likert-type scale comprising of “Strongly Disagree (SD) = 1; Disagree (D) = 2; Neutral (N) = 3; Agree (A) = 4; Strongly Agree (SA) = 5” was used to respond to the questions on the questionnaire. The questionnaire comprised 34 items grouped under four sections. Section A requested demographic data regarding the gender and age of the respondents. Items under Section B, C and D on the questionnaire were used to address Research Objective 1. Section B provided questions that solicited accounting students’ knowledge and understanding of ethics (moral efficacy) using 12 items adapted from [Albaum and Peterson \(2006\)](#), [May et al. \(2014\)](#), and [Onumah \(2019\)](#). Section C using 8 items adapted from [May et al. \(2014\)](#) and [Ahinful, Addo, Boateng and Boakye \(2017\)](#), were used to determine the moral meaningfulness of accounting students. Section D used 12 items adapted from [Howard \(2012\)](#), [May et al. \(2014\)](#), and [Sonnetag and Barnett \(2016\)](#) to elicit responses about the moral courage of accounting students in their potential or future work endeavours.

The questionnaire was analysed to determine its reliability using Cronbach’s Alpha (α). The results revealed the following Cronbach’s Alpha (α) values: moral efficacy (0.87), moral meaningfulness (0.93), and moral courage (0.86). The questionnaire was, therefore, deemed reliable because according to [May et al. \(2014\)](#), a Cronbach’s Alpha value of at least 0.7 is an acceptable reliability coefficient. Additionally, Kaiser-Meyer-Olkin’s (KMO) adequacy and Bartlett’s test of sphericity were used to test the validity of the questionnaire. To deem the questionnaire valid, sample adequacy score of at least 0.50 (Kaiser-Meyer-Olkin) and a Bartlett’s test of sphericity ($p = 0.000$; $p < 0.05$) must be met ([Goolamally & Ahmad, 2014](#)). The results revealed the following: moral efficacy (KMO = 0.904; $p = 0.000$), moral meaningfulness (KMO = 0.924; $p = 0.000$), and moral courage (KMO = 0.898; $p = 0.000$).

3.4. Data Collection Procedure

Prior to data collection, the researchers applied for a letter of ethical clearance from the Institutional Review Board (IRB) of UCC in Ghana. After successfully going through the process and receiving letter of ethical clearance (UCCIRB/CES/2021/80), the researchers then proceeded to gather data from the respon-

dents. Before going to the field to collect data, the researchers made contact with some of the lecturers of the accounting programmes, whose students were chosen as respondents of the study to seek permission for data collection during their lecture period. During the meeting with the respondents, the investigators introduced themselves and explained the reasons why they were in their class. Upon getting the respondents' consent, the data collection exercise commenced.

Respondents were told not to write their name or student registration number on the questionnaire given to them. This was to protect their anonymity or privacy regarding the answered questionnaire. The respondents were also made aware that their responses would be used solely for academic reasons. Afterwards, each respondent was given a questionnaire. The respondents were given 20 minutes to answer the items on the questionnaires.

3.5. Data Analysis

The questionnaires retrieved were screened and sorted. Out of 250 questionnaires sent for data collection, 233 questionnaires were answered and 17 questionnaires were unanswered. The unanswered questionnaires were a result of some respondents' refusal to partake in the study. Out of the 233 answered questionnaires collected (a return rate of 93%), 219 were fully completed (all items answered), while 14 were partially completed. The fully completed questionnaires were inputted into the Statistical Package for the Social Sciences (SPSS) datasheet (v. 25). Data entry errors were also checked. Item 11 of Section B and item 5 of Section D on the questionnaires were reverse coded as SD = 5, D = 4, N = 3, A = 2, SA = 1. Item 11 and 5 responses were reverse coded because the statements were negatively worded. The demographic profiles of the respondents were analysed using frequencies and percentages.

Research Objective 1 was analysed using mean and standard deviation (descriptive statistics). The scale for the mean was interpreted as <2.5 = disagree; 2.5 - 3.4 = neutral; >3.4 = agreement to all the statements under Sections B, C and D of the questionnaire to which the mean was related. Standard deviation was interpreted as 1 or >1 = responses differ much from each other (heterogeneous); <1 = responses did not differ much from each other (homogenous). The mean value obtained for morality, using ME, MM and MC as determinants, was interpreted as <2.5 = low level of morality; 2.5 - 3.4 = moderate level of morality; and >3.4 = high level of morality.

Research Objective 2 examined whether there is a difference in morality among male and female accounting students. There are two variables: morality (dependent) and gender (independent). The morality variable was ascertained using the data used in answering Research Objective 1. Before choosing the inferential statistic tool, a normality test was assessed on the dependent variable (morality). The findings (see **Table 2** and **Table 3**) indicated that the dependent variable was not normally distributed (Kolmogorov-Smirnov: $p < 0.001$ and negative skewness: z-score = -4.8720). Although the independent variable (gender) has

two categories (male and female), the normality assumption test was not met. Therefore, the Independent T-test (parametric) was not appropriate to be used for the analysis; rather, Mann-Whitney U test (non-parametric). Afterwards, the differences between the male and female accounting students' ethical behaviour were analysed using the Mann-Whitney U test with a significance threshold of 0.05.

4. Results

4.1. Test of Normality

Below are **Table 2** and **Table 3** showing results of the test of normality for morality.

Table 2. Descriptive tests for morality.

Variable	Mean	5% Trimmed mean	Std. dev.	Median	IQR	Skewness	Kurtosis
Morality	3.6398	3.6710	0.67858	3.8056	0.75	-0.799	-0.377

Source: Field survey by the Frimpong and Omane-Adjekum.

Table 3. Tests of normality for morality.

Construct/Variable	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Morality	0.116	219	0.000	0.949	219	0.000

Source: Field survey by the Frimpong and Omane-Adjekum.

4.2. Demographic Characteristics of Respondents

The study investigated two characteristics of the respondents, namely, gender and age. The results are presented in **Table 4**.

Table 4. Demographic characteristics of respondents.

	Variable	Frequency (<i>n</i>)	Percentage (%)
Gender:	Male	156	71.2
	Female	63	28.8
	Total	219	100
Age (years):	20 - 22	58	26.5
	23 - 25	120	54.8
	26 - 28	28	12.8
	Above 28	13	5.9
Total		219	100

Source: Field survey by the Frimpong and Omane-Adjekum.

From **Table 4**, the study was dominated by male students ($n = 156$, 71.2%), while the female students consisted of $n = 63$, 28.8%. The majority of the students were between the ages of 23 and 25 years ($n = 120$, 54.8%), followed by those between the ages of 20 and 22 years ($n = 58$, 26.5%). This is followed by students within the age range of 26 and 28 years ($n = 28$, 12.8%). Only a small number of students ($n = 13$, 5.9%) were discovered to be above 28 years.

4.3. Level of Morality among Accounting Students

The students responded to various items concerning their moral abilities when dealing with ethical issues. These moral abilities (ME, MM and MC) served as indicators for determining the level of morality of these respondents. The results obtained for the indicators, i.e., ME, MM and MC, are presented in **Tables 5-7**, respectively.

Table 5. Accounting students' moral efficacy.

	Statement	Mean	SD
1.	My extensive knowledge and understanding of ethical issues stem from the business ethics education I received at my department during my four-year degree programme	3.06	1.19
2.	My knowledge and understanding of Business Ethics has assisted me in recognising accounting issues with ethical implications	3.47	1.15
3.	My study of business ethics has assisted me in developing a sense moral obligation or responsibility toward people and society	3.64	1.10
4.	I will be able to handle ethical issues and challenges in accounting practices because of my knowledge and understanding of Business Ethics	3.61	1.08
5.	I am convinced that my ethical knowledge and understanding gained through my department's business ethics education will help me analyse ethical issues and come up with solutions	3.61	1.09
6.	My knowledge and understanding of Business Ethics education will help me represent my work unit in meetings with management regarding ethical issues	3.65	1.06
7.	My knowledge and understanding of Business Ethics education will assist me in developing new workplace evaluation procedures for ethical issues	3.63	1.08
8.	My understanding of business ethics will enable me to suggest to management changes that could be made to the workplace's ethical climate	3.58	1.18
9.	If a company's accountant is found to have participated in an unethical behaviour that primarily serves their interests rather than the interests of the company, they should be dismissed	3.57	1.11
10.	Business behaviour that is legal is ethical	3.51	1.19
11.	In order to succeed in business, it is often necessary to compromise one's ethics	3.14	1.31
12.	If a company's accountant is found to have participated in unethical behaviour that primarily serves the company's interests rather than their interests, they should be dismissed	3.38	1.18
	Overall level of moral efficacy	3.50	0.73

Source: Field survey by the Frimpong and Omane-Adjekum.

Table 6. Accounting students' moral meaningfulness.

	Statement	Mean	SD
1.	Because of my studies in business ethics, I now realize how important it is to me personally to act morally at work	3.76	1.14
2.	I have learned from studying business ethics that acting morally gives purpose at work	3.75	1.10
3.	I have learned through studying business ethics that upholding moral principles regularly enhances one's job ethics	3.89	1.05
4.	Through Business Ethics education, I have learned that upholding moral principles give me meaning at work	3.65	1.11
5.	I have learned through studying business ethics that upholding moral principles at work will make me more satisfied with the work I do	3.82	1.11
6.	I have learned through studying business ethics that upholding moral principles at work will make it easier to deal with grey areas	3.81	0.98
7.	Business ethics education has taught me that maintaining high morals at work develops one's strength to make right decisions	3.89	1.05
8.	Business Ethics education has taught me that maintaining high morals at work will improve my professional image	3.98	0.98
	Overall level of moral meaningfulness	3.82	0.88

Source: Field survey by the Frimpong and Omane-Adjekum.

Table 7. Accounting students' moral courage.

	Statement	Mean	SD
1.	In order to uphold my moral beliefs, I do not mind confronting others	3.76	1.13
2.	Even if it meant getting into trouble at work, I would be willing to stand up for my moral convictions publicly	3.74	0.99
3.	I am prepared to speak up for what I believe, even if I lose my co-workers at work	3.79	0.97
4.	Even if the cause is unpopular and would require confronting influential co-workers, I would speak up for a righteous cause	3.84	0.99
5.	If my job promotion is at risk, I would refrain from speaking out about unethical situations	3.39	1.28
6.	I will confront my superiors at work if I think they are doing something that is not right	3.38	1.13
7.	If I notice a co-worker acting improperly at work, I will confront them	3.68	1.05
8.	Even if it could damage my relationship with them, if I see that my co-workers are acting in an unethical or unlawful manner, I would report it	3.44	1.10
9.	I will always express my opinions on moral issues to my supervisors	3.68	1.03
10.	When the group's decision conflicts with my ethical principles, I will disagree with it	3.55	1.10
11.	I would inform my co-workers when I have acted unethically, even when it makes me appear incompetent	3.56	1.07
12.	I would question their orders if I disagreed with their moral implications, even though my supervisor could be offended	3.57	1.03
	Overall level of moral courage	3.61	0.68

Source: Field survey by the Frimpong and Omane-Adjekum.

The results from **Tables 5-7**, using their overall means, indicate that there is a high level of moral efficacy ($M = 3.50$), a high level of moral meaningfulness ($M = 3.82$) and a high level of moral courage (3.61) among accounting students. The indicators, using their overall means, were used to determine the morality of the accounting students. **Table 8** displays the results.

Table 8. Summary of morality.

Construct (determinants)	Mean (M)	Standard deviation (SD)
Moral efficacy	3.50	0.73
Moral meaningfulness	3.82	0.88
Moral courage	3.61	0.68
Overall level of Morality	3.62	0.76

Source: Field survey by the Frimpong and Omane-Adjekum.

Results of the overall level of morality indicated a mean value = 3.62 for the morality of the accounting students. The finding reveals that accounting students have a high level of morality ($M = 3.62$).

4.4. Difference in Morality among Accounting Students Based on Gender

The dependent variable is students' morality, while gender is the independent variable, which consists of female and male accounting students. Since gender consists of two categories and morality construct is not normally distributed, Kolmogorov-Smirnov: $p < 0.001$ and negatively skewed because the z-score is not between -1.96 and $+1.96$ (Kim, 2013), that is: z-score [Statistic/Std. Error] = -4.8720 (see **Table 2** and **Table 3**), Mann-Whitney U test at a significance level of 0.05 was used to test whether a significant difference exists between male and female accounting students' morality. **Table 9** presents the results.

Table 9. Mann-Whitney U test for morality based on gender.

Variable	Group (gender)	Median (Mdn)	IQR	U test	Df	Sig.
Morality	Male	3.70	0.78	4489.500	156, 63	0.317
	Female	3.84	0.72			

Source: Field survey by the Frimpong and Omane-Adjekum.

The results in **Table 9** revealed no statistically significant differences between male accounting students ($Mdn = 3.70$, $IQR = 0.78$) and female accounting students' morality ($Mdn = 3.84$, $IQR = 0.72$), $U(156, 63) = 4489.50$, $p = 0.32$ (2 tailed). Hence, the researchers failed to reject the null hypothesis. Therefore, no differences exist in the median values of female and male accounting students. Both male and female accounting students have equal levels of morality.

5. Discussions

Research Objective 1 findings confirmed [May and Luth's \(2013\)](#), and [May et al. \(2014\)](#) findings. Their findings suggested that students who are taught business ethics show a high level of morality. This means that the knowledge and understanding gained by accounting students through business ethics education that was provided to them have improved their level of morality. According to Kohlberg's theory, students' morality is developed through ethics education. The finding is also supported by Rest's theory, which suggests that students obtain certain moral abilities (i.e., ME, MM and MC) after being taught ethics education (i.e., Business ethics education), and when their moral abilities are developed, their morality is developed as well.

For Research Objective 2, although it is proposed that gender disparities exist due to differences in both women's and men's ethical perspectives ([Ritter, 2006](#)), gender differences regarding the morality of accounting students in the study suggested otherwise. The finding rather confirms the findings of [Taylor \(2013\)](#), and [Boateng and Agyapong \(2017\)](#). The findings of both studies revealed that gender was not statistically significant in influencing students' morality. Therefore, no differences exist between female and male accounting students' morality. However, the study's results indicated no statistically significant difference between female and male accounting students' morality disapproved that of [Gammie and Gammie \(2009\)](#) and [Mahasneh \(2014\)](#), who found that there is a significant difference between female and male students' morality.

6. Conclusion

Accounting students' high level of morality implies that there has been the development of some moral abilities (i.e., ME, MM and MC) within the students. This is a good indication that they possess morals that will help them exercise their duties and be able to deal with ethical issues at their potential or future workplace after completion of their four-year university degree programme. Also, the finding that there was no statistically significant difference between female and male accounting students' level of morality shows that both genders of students have the same level of morality. This means that none of them is more morally principled than the other. Therefore, both male and female accounting students will exhibit an equal level of morality in the workplace after completion of their four-year university degree programme.

7. Recommendations

Even though the students indicated their belief, willingness and courage (morality) to deal with ethical issues, the Faculties or Departments concerned should continue to educate the students about ethics to improve their morals further. This could be done by introducing additional courses with ethical contents that are more educative, contain current ethical issues and seek to inculcate and develop moral abilities within the students. Also, contents of existing courses that

educate students about ethics should be updated, to be abreast with current ethical related issues.

8. Suggestions for Further Research

Future research should extend the research to include all Ghanaian universities that offer accounting programmes to provide a broader scope of the topic. Future research should also investigate the theoretical relations among ME, MM and MC.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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