OSJI OPEN SCIENCE JOURNAL

RESEARCH ARTICLE

Teacher's Professional Values (Objectivity, Honesty, Integrity and Self-control): Validating the Mediating Role of Ethnical Perception Using Confirmatory Factor Analysis (CFA)

Simon Ntumi*, Tapela Bulala[2], Abraham Yeoboah[3], Daniel Gyapong Nimo[4], Esther Serwaa Antwi[1]

[1]University of Education, Winneba, Ghana
[2]Botswana University of Agriculture and Natural Science, Botswana
[3]Akenten Appiah-Menka University of Skills Training and Entrepreneurial Development, Ghana
[4]Bekerum College of Education, Bekerum Ghana

*Corresponding author: Simon Ntumi: sntumi@euw.edu.gh

OPEN ACCESS

Citation: Ntumi S.,Bulala. T., Yeoboah A., Nimo D. G., Antwi E.S. (2024) Teacher's Professional Values (Objectivity, Honesty, Integrity and Self-control): Validating the Mediating Role of Ethnical Perception Using Confirmatory Factor Analysis(CFA). Open Science Journal 9(1)

Received: 18th April 2023

Accepted: 14th September 2023

Published: 14th February 2024

Funding: The author(s) received no specific funding for this work

Competing Interests: The authors have declared that no competing interests exists.

Abstract:

Aim: The study aim was to validate how ethical perception could mediate teachers' professional values such as objectivity, honesty, integrity and self-control in the Ghanaian context using CFA.
Methods: A cross-sectional study design was employed and the convenience sampling technique was used to administer a total of 248 questionnaires to basic and senior high school teachers in the southern part of Ghana
Findings: The study found that objectivity as one of the professional values of teachers has negative effect on the ethical perceptions of teachers and the results were not statistically significant (β=-0.015, SE.=0.061, p=0.800**, n=248). It was again found that integrity was statistically significant and had negative effect on ethical perceptions of teachers (β =-0.131, SE.=0.079, p<0.01, n=248). Again, it was found that honesty has statistically significant a positive effect on the ethical perceptions of teachers (β =0.413, SE.=0.066**, p<0.001, n=248). It was again found that self-control was statistically not significant and had negative effect on ethical perceptions of teachers (β =-0.097, SE.=0.096, p=0.309**, p<0.001, n=248). Finally, it was found that ethical perception was statistically significant and had positive effect on the ethical decisions of teachers (β =0.427, SE.=0.065, p<0.001, n=248). In the end, the results suggest that there is a partial mediation effect of professional

values on teachers' ethical decisions (Obj.=-.007; p=.853; Hon.=.176; p=.003**; p=.039*; Inter.=-.056; Self-Con.=-042; p=.234**, p<0.001, n=248).
Conclusion: The study concluded that professional values, ethical perceptions and decisions of ethical behavior of teachers are an important part of a good workplace culture and should be encouraged in order to foster a strong working relationship for effective teaching and learning process.
Recommendation: The study recommended that school heads in Ghana should create a framework at the workplace in which teachers can test and practice their professional values, ethical perceptions and decisions of ethical behavior with others to promote effective teaching and learning.

Keywords: Professional, Values, Ethical, Perceptions, Decisions

Introduction

Teachers decision-making behaviour has long been linked to professional values. However, Jaijairam (2017) argued that the significance of professional values in ethical decision-making inside an organization is still not fully understood. Teaching professionals that are devoted to their career would be more accountable in furthering the profession's values and enhancing their performance (Barrainkua & Espinosa-Pike, 2018). Also, Bebbington, Russell and Thomson (2017) proposed that the professional values of teachers develop over time and these values guide them in making ethical decisions at their job. Ethical perception is subjective, in that every individual has how they see things and make choices or select information. This can also be affected by the individual's personal values as a person. Therefore, teachers' personal values such as honesty and integrity affect how they perceive ethical situations to make ethical decisions (Tehranineshat, Torabizadeh, & Bijani, 2020).

Educators need to produce ethical behavior and adopt attitude against of society is considered to be currently undergoing a crisis however it must keep its stability in terms of current education. As a starting point, ethical behavior and attitude provides the educators a framework by which non-academic constructions will be reconstructed to keep a desirable social order. Building on a new perspective that enable us to understand non-academic constructions' powers and the impact of those powers on school actors provides an insight towards to educators in educational settings (Chen, et al., 2021; Bijani, et al., 2019).

Teachers are those people in an organization responsible for making teaching attractive (Miller, 2019). Teachers have a responsibility to make ethical decisions based on the values of their profession. To make these decisions, they would have to make a choice between what is ethically right or wrong while taking the values of their profession into consideration but these ethical decisions are affected by the teacher's ethical perception. Since it begins with an individual's recognition of an ethical context, ethical perception is crucial to ethical decision-making. The ethical perception is "the relative awareness or the recognition of 'ethical features'

inside the ethical situations," according to Jayadi, et al., (2017). This means the teacher should be able to tell when he is faced with an ethical situation and how best to deal with it according to the values of his/her profession.

Ethical decisions and professional values are clear, and they are generally at the heart of any organization (Ferrell & Fraedrich, 2021). Ethics and values must be examined and re-evaluated in light of the many effects they have on both employers and employees in the company. When it comes to ethics, it can be said that they aid individuals in making judgments that are typically in the best interests of everyone else, including employers, organizational stakeholders, and also of the individuals themselves (Bridges, 2018). Turyakira (2018) asserted that there are several issues in the workplace which make ethical decisions and professional values necessary in the work environment, including theft, fraud, discrimination, and personal politics. Anwar (2020) found that teachers who have adhered to professional rules of ethics and have a high level of competence and experience had credible opinions. This study seeks to re-emphasize the importance of making appropriate ethical decisions by teachers in businesses and its roots, and give policy makers newer perspectives.

Despite the prevalence of teaching-related issues, previous studies in ethical issues have focused on moral reasoning and ethics of teachers (Nwanyanwu, 2018; Prayoga & Afrizal, 2021; West, 2017; Gaffikin & Lindawati, 2012) with few of them focusing on how ethics are useful and necessary for a teacher's profession (Flanagan & Clarke, 2017; Rossouw, et al., 2010; West & Buckby, 2020). There have also been a few studies on teachers' ethical perceptions (Felton, Dimnik & Bay, 2008; Odar, et al., 2017). However, most of these studies were conducted in Europe, Asia and America. As a result, the impact of professional values, ethical perceptions and ethical decision making of teachers on an organization on the local level cannot really be determined. Therefore, the aim of this study is to look at professional values, ethical perception and ethical decision making and their impact on teachers and teaching in Ghana.

Research hypothesis

H1: There will be no significant effect of Ghanaian teachers' objectivity on their ethical perception

H2: There will be no significant effect of Ghanaian teachers' honesty on their ethical perception

H3: There will be no significant effect of Ghanaian teachers' integrity on their ethical perception

H4: There will be no significant effect of Ghanaian teachers' self-control on their ethical perception

H5: Ghanaian teachers' ethical perception will not mediate their professional values

Conceptual framework

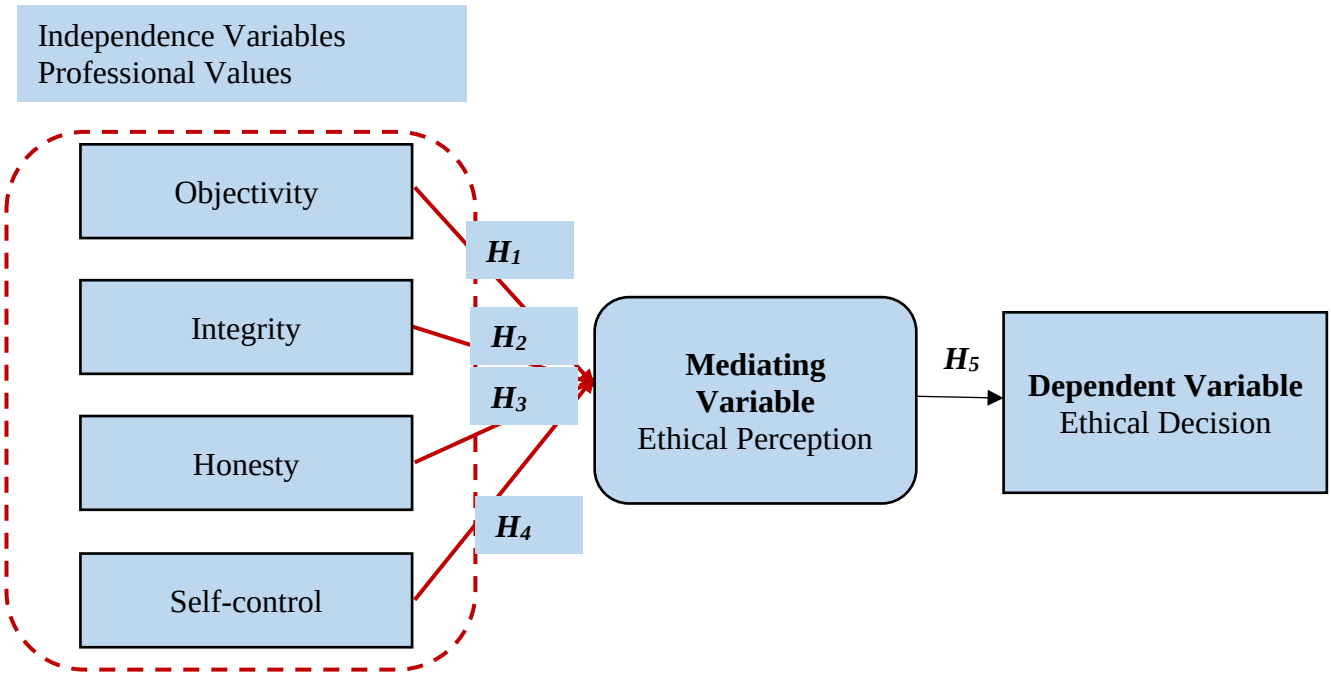


Figure 1: Conceptual framework

From Figure 1 the independent variables as construed as objectivity, integrity, honesty and self-control. The dependent variable is Ethical Decisions and the mediating variable is Ethical Perception. According to Mackinnon (2015), a mediating variable is a variable that occurs in the causal sequence that connects an independent variable to a dependent variable, so that the independent variable causes the mediating variable, which causes the dependent variable. In the figure 1, Professional values causes or impacts ethical perception which in turn impacts ethical decisions.

Methodology

Research design

The study employed the cross-sectional research design despite the availability of other designs such as exploratory, case study, among others. Cross-sectional study design investigates population data at one time. This method is often utilized in determining possible connections or collecting early data to support future research and testing. The study chose a cross-sectional research design because data for the research was collected at a particular point in time. The cross-sectional research design was also chosen because it allowed the collection of data to make inferences about the study's population and comparisons of ethical values, ethical perception and ethical decisions at the same time (Rahi, 2017).

Sampling procedure

The study collected data from basic and senior high school teachers in both private and public sectors. A total of 248 respondents were selected among the various schools in Ghana. Non-probability sampling was used in this research. When it is not feasible to statistically choose a sample at random in market research where there is no sampling frame, non-probability sampling gives a range of alternative ways to select a sample by depending on subjective judgement, according to Saunders et al. (2009). The survey collected data from teachers in Ghana. The study targeted teachers of private and public schools in the Southern part of Ghana.

The sample size of the study was a total of two hundred and forty-eight (248) responses. The study used convenience sampling technique. In contrast to qualitative purposive sampling, convenience sampling may be used in a quantitative approach (Teddlie & Yu, 2017; Etikan, Musa, & Alkassim, 2016). The argument for employing convenience sampling is that certain research appears to have almost finite instances and it may not be viable to include every participant (Etikan, Musa, & Alkassim, 2016). Furthermore, convenience sampling is an excellent method for selecting respondents who fulfil the inclusion requirements.

Instrumentation

From the examination and categorization of the relevant empirical literature, within the context of teachers, these professional values were used. They are: objectivity, integrity, honesty and self-control (International Ethics Standards Board for Teachers (IESBA), 2013; Alleyne, et al., 2013). This section also discussed the measurement of the dependent as well as the mediating variable.

Objectivity is one of the professional value of teachers. Objectivity is the characteristic or trait of being objective. This means the absence of prejudice towards one side or independence from inclination. Teaching information should be independent and backed by unbiased data, according to the objectivity principle (Ningrum & Wedari, 2017). The following indicators were used to assess objectivity: How essential is it to you to be firm in making ethical decisions? Is it critical that teaching information be independent and supported by objective evidence? Favoritism, conflicts of interest, or excessive influence from others should not be allowed to trump business judgement by teachers (Lubis, 2021; Aifuwa, et al., 2018).

The next professional value the study employed is integrity. The characteristic of truth and strong moral values is integrity. Merriam Webster states that the integrity of the codes, i.e., the quality or status of their completeness and division, in particular are moral or artistic values. Integrity is a key element in the profession of teaching. In order to retain their credibility, teachers must be open and clear about their students. Teachers should prevent personal profit or advantage from using private information (Lapteş, 2019). The following indicators were used to assess integrity: When dealing with personal and corporate information, maintain rigorous ethical and integrity requirements; without fear of repercussions, report unethical behaviour or procedures; and when unethical or improper actions and procedures are observed, senior management must take appropriate action (Suhayati, 2017; Small, et al., 2017).

Also, honesty is the next professional value the study employed. Honesty is the uprightness of character or action. Honesty according to Merriam Webster, is the adherence to the facts or fairness and straightforwardness of conduct. Teaching relies on honesty since it enables investors to believe the facts, they obtain concerning the companies they invest in. The fundamental attribute of policymakers that enables them to make correct judgments is honesty. (Lubis, 2021). The following indicators were used to assess honesty: To what degree should you never cheat or have anything to do with cheating, even if it is for a close friend; even if it means hurting oneself or others, one must always tell the truth; without concern for the repercussions, one must state his or her views truthfully; and even if a friend is implicated, it is advisable to give information about misconduct (Sayidah, et al., 2020; Sepasi, 2019).

Furthermore, self-control is the final professional value the study employed. Self-control is the capacity to manage behaviour to prevent tentations and achieve objectives. Self-control according to Merriam Webster, is restraint exercised over one's own impulses, emotions, or desires. The following indicators were used to assess self-control: Even if you have a valid reason to be angry, you should never express it; it is beneficial to exercise self-control; whatever the situation, never burn your bridges; and it is preferable to respond to rage with tolerance (Suradi, 2019; Sui, et al., 2021).

The next to discuss is the ethical decision variable. Ethical Decision means that individuals should understand how their beliefs impact decision making in order to guarantee that the decisions represent those values. For ethical decision making to occur in a teaching setting, those values should contain the following professional behaviour principles: independence, honesty, objectivity, and due care (Oboh, 2019; Sui, et al., 2021).

The following indicators were used to assess teacher's ethical decision: I assess the impact the choice will have on the people involved and pick what appears to be the best option for the majority of them; the records of a firm contain information that is accurate. It is my responsibility to reflect the truth, regardless of the repercussions; Teaching and ethics have nothing to do with each other; As a teacher, I expect to be asked ethical questions only infrequently, if at all; Teaching is concerned with the facts, not with ethics; Most teachers' ethical dilemmas might be eased, if not completely removed, if they just followed the ethics; As a teacher, my sole ethical obligation is to disclose the truth as dictated by the company's records and facts. I obey established standards, such as laws, and I look for rules to regulate all ethical situations; What is ethical is what is best for the largest number of people; My ethical decisions are made based on what is best for me; I will always pick what is best for myself; Teachers should be required to take an ethics course as part of their education, which would assist all workers in resolving moral and ethical difficulties that face the teaching profession and the corporate community in general (Noval & Stahl, 2017).

Ethical perception focuses on the conscience and comprehension among persons that they are a moral actor in a moral problem (Jones, 2021). Ethical perception is the source of the whole decision-making process (Adekoya, et al., 2020). The following indicators were used to assess ethical perception: On the job, I am doing personal business; submitting reports on time, quality, and quantity; taking a day off by calling in ill; allowing a subordinate to break the regulations of the organization; accepting gifts or favours in return for favourable treatment; assigning responsibility for mistakes to an unwitting coworker (Prayogo & Afrizal, 2021).

Data analysis

Data processing and analysis involves reducing a large set of data collected into useful information and reports that subsequently provides useful input into decision making and policy formulation. Through the use of descriptive and inferential statistics, it was possible to reduce the data set. To organise and summarise data depending on respondents' attributes, descriptive statistics are used. To form conclusions about the population based on sample estimates, we use inferential statistics. Using IBM SPSS version 23 and SPSS AMOS version 23, descriptive and inferential statistics were computed. The data were analysed by means of descriptive statistics and inferences. The results were presented in frequencies, percentages, means, standard deviations, regression and correlation analyses which were displayed in tables and figures. It was decided to use these analytical techniques because of the study's objectives and the variables that would be measured. A big sample (>30) and normal data are among the general assumptions made by statistical techniques (Creswell, 2014).

In the analysis, both validity and reliability tests were performed. In order to assess normality scales and outliers, the Kaiser-Meyer-Olkin (KMO) sample adequacy measures and the Bartlett sphericity test were utilised. The result indicated that the KMO value was 0.888 with Bartlett's sphericity test being significant at 0.000. This shows that the data set is suitable for study of factor. The factor analysis for each structure was introduced in Narasimhan and Jayaram (1998) to ensure the unidimensionality of scales.

If the factor loadings are below 0.5 and do not charge with the same factor, then the indicator items were removed. Annex C indicates that all measuring elements have heavy loads on the building to be measured suggesting unidimensionality (Johnson & Wichern, 2014). All dependent variables have been assessed using item to total correlations and the α-coefficient of Cronbach (Enkavi, et al., 2019). All buildings in this research are over the suggested 0.70 level. The value of Cronbach alpha is 0.887. The reliability of the building is therefore substantially guaranteed. Further, the results of this study show the reliability and validity of the measures used to carry out the hypothesis tests.

Descriptive statistics and correlation and regression analysis were used to analyse this data. The results were presented in frequencies, percentages, means and standard deviations which were displayed in tables and figures. These analytical tools were chosen due to the objectives of the study and the variables of measurement. General assumptions of statistical tools include homogeneity of variance, linearity of data, independence of data, large sample (≥30) and normality of the data (Creswell, 2014).

Results

Descriptive statistics

The descriptive analysis of the teachers' professional values, ethical perception and ethical decisions seeks to address the research objective one. In explanatory studies, which involves using the perception of studies participants for statistical analysis, it is expected that a descriptive analysis is performed before any further analysis (Pallant, 2011). It is, therefore, expected that before the data is subjected to further statistical analysis (correlation, regression), the data is analysed using

descriptive statistics to measure for central tendency such as mean and standard deviation. The descriptive analysis describes the extent to which the study's participants agreed with the statements in the study questionnaire. Pallant (2011) also indicated that using descriptive statistics enables a researcher to obtain a measurement of study variables. The descriptive statistics of this study are presented in Table 1.

Table 1: Descriptive Statistics of the Study Variables

				Skewness		Kurtosis	
	N	Mean	Std. Deviation	Statistic	Std. Error	Statistic	Std. Error
Objectivity	248	2.6344	1.31971	.636	.155	-1.000	.308
Integrity	248	3.0255	1.27884	-.051	.155	-1.166	.308
Self-Control	248	3.5161	.92137	-.629	.155	-.162	.308
Honesty	248	3.1633	1.11102	-.109	.155	-.901	.308
Ethical Perception	248	2.9171	1.08418	.185	.155	-.665	.308
Ethical Decision	248	2.8992	1.10508	.094	.155	-.935	.308

Significant at $p < 0.05$

Table 1 reveals that data was obtained from all 248 respondents on the four major professional values of teacher together with their ethical perceptions and decisions. For teachers' professional values, self-control variable had a mean of 3.5 and standard deviation of 0.921, followed by the Honesty with a mean of 3.163 and standard deviation of 1.111. Objectivity and integrity had means of 2.634 and 3.026, with corresponding standard deviations of 1.320 and 1.279 respectively. This implies that Teachers in Ghana value self-control more than the other professional value, followed by honesty and integrity and finally, objectivity.

The descriptive statistics table also provides information concerning the distribution of scores on continuous variables (skewness and kurtosis). This information necessary if these variables are to be used in parametric statistical techniques and in exploring the predictive ability of a set of independent variables on one continuous dependent measure in higher statistical analysis like multiple regression. (E.g., t-tests, analysis of variance). The skewness value provides an indication of the symmetry of the distribution. kurtosis, on the other hand, provides information about the 'peakedness' of the distribution. The respective skewness and kurtosis values were between 0.773 to -1.245 and -0.153 to 2.334, respectively. This implied that the scores are of a normal distribution. Kurtosis can result in an under-estimate of the variance, but this risk is also reduced with a large sample.

Convergent validity

The purpose of standardized factor loadings was to see if the constructs had a large proportion of variations (Hair, Ortinau, & Harrison, 2010). The loadings on the factors must be more than 0.50. From the results below, the data have standardized loadings more than 0.50. Based on the results, there is evidence that the constructs adhere to construct convergent validity.

Discriminant validity

The discriminant validity technique was used to determine the independence of the constructs, as demonstrated by (Hair et al., 2010). The Average Variance Extracted statistical approach was used to calculate the discriminant validity (AVE). The calculated AVE value was compared to the square correlation of each component.

Table 2: Inter-Item Correlation

	CR	AVE	MSV	Max R(H)	ED	EP	Obj	Hon	Int	SC
ED	0.958	0.676	0.537	0.964	0.822					
EP	0.930	0.656	0.182	0.932	0.427***	0.810				
Obj	0.918	0.788	0.260	0.918	-0.091	-0.129†	0.888			
Hon	0.920	0.743	0.537	0.924	0.733***	0.400***	-0.115†	0.862		
Int	0.910	0.773	0.260	1.003	-0.096	-0.111†	0.509***	-0.101	0.879	
SC	0.825	0.546	0.050	0.852	0.223**	0.025	-0.038	0.208**	-0.076	0.739

ED – Ethical Decision, EP – Ethical Perception, Obj – Objectivity, Hon – Honesty, Int – Integrity, SC – Self Control.
Significance of Correlations: † $p < 0.100$*; $p < 0.050$; ** $p < 0.010$; *** $p < 0.001$

The AVE of any two structured components must be larger than the square correlation of any given two constructs to ensure discriminant validity. In a table, the square root of the Average Variance Extracted is presented in the leading diagonal. Table 2 shows that virtually all of the constructs are larger than the square root of the AVE, showing that there is no multicollinearity across the constructs and hence independence of the constructs (Byrne, 2001).

Test of model fit using overall fit and other relative measures

Kline (2015) recommends that the following indices be reported as a minimum for structural equation models (SEM): The chi-square model, the RMSEA, the CFI, and the SRMR. The overall model fit was not statistically appropriate for the dataset because some of the model fit indicators did not reach the generally accepted level. The following values were found in the dataset. The chi-square value was 1244.335, the degree of freedom was 449, and the probability value was 0.000. RMSEA, Root Mean Square Error Approx. = 0.085 with PCLOSE of 0.000; Standardized RMR = 0.0509; CFI, Comparative of Fit Index = 0.883; NFI, Normed of Fit Index = 0.829; and IFI, Incremental Fit Index = 0.870. From the data indicators such as CFI, NFI and IFI did not meet the threshold of greater than 0.9. Also, CMIN/DF was 2.771 and was less than the acceptable threshold of less than 3. However, RMSEA was less than 0.07 and Standardized RMR was less than 0.08 which met the recommended value.

Table 3: Goodness-of-Fit Indices for the Proposed Model for the Study

Fit indices	Author	Acceptable values	Model Values	Goodness of Fit
Absolute indices				
Chi-square (χ^2)			948.962	
Df			438	
χ^2/df	Tabachnick & Fidell (2007)	<3.00	2.167	Acceptable
Root Means Square Error of Approx. (RMSEA)	Hu & Bentler, (1999)	< 0.07	0.069	Acceptable
Standardized Root means residuals (RMR)	Tabachnick & Fidell, 2007	< 0.08	0.0482	Acceptable
Incremental fit indices				
Comparative Fit Index (CFI)	Hu & Bentler, (1999)	>= 0.900	0.925	Acceptable
Incremental Fit Index (IFI)	Bollen, (1990)	>= 0.900	0.925	Acceptable
Tucker-Lewis Index (TLI)	Bollen, (1990)	>= 0.900	0.915	Acceptable

Chi-square (χ^2) = 948.962, Significant at p< 0.05

The data was then, modified based on the modification indices feature in the AMOS v23. The modification indices feature suggested a number of variables that can be covaried to optimize the model indicators. Based on the suggestions, these variables were covaried from Brand Performance Construct: ED1-ED3, ED2-ED4, ED2-ED7, ED3-ED4, ED4-ED7, ED7-ED8, ED2-ED9, ED3-ED7, ED4-ED10, EP2-EP6 and EP4-EP6. After these few modifications, the overall model was statistically of good model fit for further analysis with the following model fit indicator values: Chi-square = 948.962, Degree of freedom = 438, Probability level = 0.000, CFI = 0.925, IFI = 0.925, RMSEA = 0.069, PCLOSE = 0.001 and Standardized RMR = .0482.

In order to evaluate the study's hypotheses, structural equation modelling using Analysis of Moment Structure (AMOS) was calculated. To conduct the changes, the analysis was performed using the Maximum Likelihood Estimator (MLE). The hypothesis findings are presented in table 5, which includes the unstandardized estimates, standardised estimates (beta-values), Standard Error (SE), significant values (p-value), and decision for the hypotheses investigated.

From the table above, there is a significant positive relationship between Ethical Perception and Honesty (b=0.486, SE.=0.091, p<0.001). There is also a significant negative relationship between Ethical Perception and Integrity (b=-0.140, SE.=0.082, p<0.1) and between Ethical Perception and Objectivity (b=-0.182, SE.=0.098, p<0.1). However, there is an insignificant positive relationship between Ethical Perception and Self-Control (b=-0.016, SE.=0.055, p=0.775).

Then, there is a significant positive relationship between Ethical Decision and Ethical Perception (b=0.447, SE.=0.083, p=0.001).

Table 4: Relationship between the main constructs

Relationship Variables			Estimate	SE.	C.R.	P
Ethical Decision	<-->	Ethical Perception	.447	.083	5.389	***
Ethical Decision	<-->	Objectivity	-.127	.092	-1.383	.167
Ethical Decision	<-->	Honesty	.837	.105	7.939	***
Ethical Decision	<-->	Integrity	-.114	.077	-1.481	.139
Ethical Decision	<-->	Self-Control	.166	.055	2.999	.003
Ethical Perception	<-->	Objectivity	-.182	.098	-1.857	.063
Ethical Perception	<-->	Honesty	.486	.091	5.337	***
Ethical Perception	<-->	Integrity	-.140	.082	-1.716	.086
Ethical Perception	<-->	Self-Control	.016	.055	.286	.775
Objectivity	<-->	Honesty	-.174	.105	-1.652	.099
Objectivity	<-->	Integrity	.799	.125	6.401	***
Objectivity	<-->	Self-Control	-.037	.071	-.522	.602
Honesty	<-->	Integrity	-.133	.088	-1.514	.130
Honesty	<-->	Self-Control	.173	.062	2.784	.005
Integrity	<-->	Self-Control	-.065	.060	-1.096	.273

Significant at p< 0.05

Test of main model fit using overall fit and other relative measures

Kline (2015) recommends that the following indices be reported as a minimum for structural equation models (SEM): The chi-square model, the RMSEA, the CFI, and the SRMR. The overall model fit was not statistically appropriate for the dataset because some of the model fit indicators did not reach the generally accepted level. The following values were found in the dataset. The chi-square value was 1451.670, the degree of freedom was 459, and the probability value was 0.000. RMSEA, root mean square error approx. = 0.085 with PCLOSE of 0.000; Standardized RMR = 0.1443; CFI, Comparative of Fit Index = 0.853; NFI, Normed of Fit Index = 0.800; and IFI, Incremental Fit Index = 0.845. From the data indicators such as CFI, NFI and IFI did not meet the threshold of greater than 0.9. CMIN/DF (3.163) was greater than 0.3. RMSEA was also greater than 0.07. Again, Standardized RMR was greater than 0.08 which did not meet the recommended value.

Table 5: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.888
Bartlett's Test of Sphericity	Approx. Chi-Square	6932.261
	df	496
	Sig.	.000

Significant at $p < 0.05$

Table 6: Pattern Matrix[a]

	Factor					
	Ethical decision	Ethical Perception	Objective	Honesty	Integrity	Self-control
Objectivity_1			.872			
Objectivity_2			.841			
Objectivity_3			.928			
Intergrity_1					.849	
Intergrity_2					.991	
Intergrity_3					.760	
Honesty_1				.805		
Honesty_2				.769		
Honesty_3				.766		
Honesty_4				.759		
Self_Control_1						.704
Self_Control_2						.815
Self_Control_3						.632
Self_Control_4						.801
Ethical_Perception1		.722				
Ethical_Perception2		.765				
Ethical_Perception3		.891				
Ethical_Perception4		.842				
Ethical_Perception5		.777				
Ethical_Perception6		.794				
Ethical_Perception7		.823				
Ethical_Decision1	.805					
Ethical_Decision2	.806					
Ethical_Decision3	.748					
Ethical_Decision4	.839					

Ethical_Decision5	.974
Ethical_Decision6	.884
Ethical_Decision7	.733
Ethical_Decision8	.660
Ethical_Decision9	.816
Ethical_Decision10	.917
Ethical_Decision11	.654

Extraction Method: Maximum Likelihood.
Rotation Method: Promax with Kaiser Normalization
a. Rotation converged in 5 iterations.
Significant at p< 0.05

Table 7: Goodness-of-Fit Indices for the Proposed Model for the Study

Fit indices	Author	Acceptable values	Model Values	Goodness of Fit
Absolute indices				
Chi-square ($\square^2$)			974.064	
Df			406	
$\square^2$/df	Tabachnick & Fidell (2007); Marsh & Hocevar, 1985	<3.00	2.399	Acceptable
Root Means Square Error of Approx. (RMSEA)	Hu & Bentler, (1999)	< 0.07	0.069	Acceptable
Standardized Root means residuals (RMR)	Tabachnick & Fidell, 2007	< 0.08	0.0752	Acceptable
Incremental fit indices				
Comparative Fit Index (CFI)	Hu & Bentler, (1999)	>= 0.900	0.910	Acceptable
Incremental Fit Index (IFI)	Bollen, (1990)	>= 0.900	0.911	Acceptable

Tucker-Lewis Index (TLI)	Bollen, (1990)	>= 0.900	0.903	Acceptable

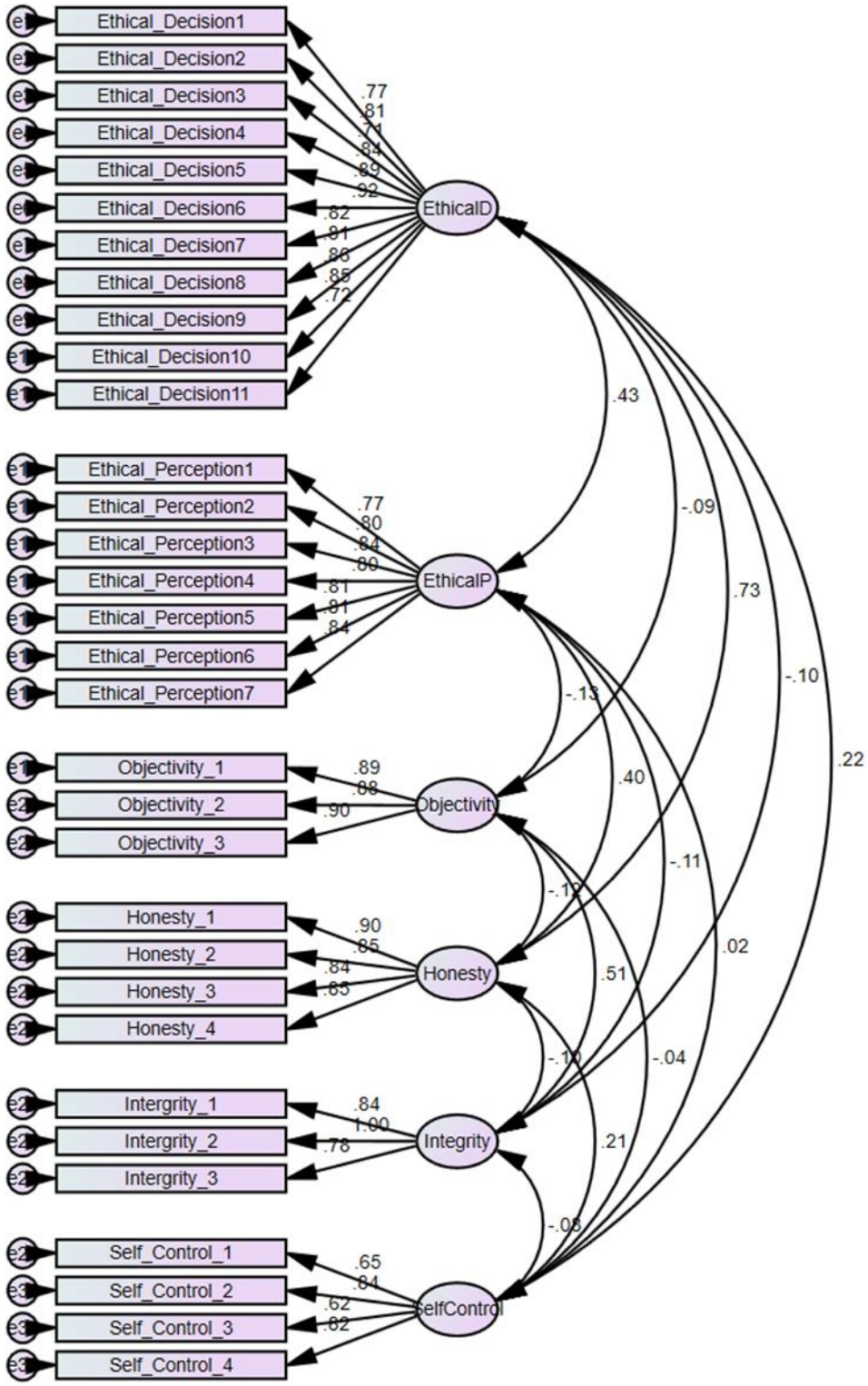
Significant at p< 0.05, $\square^2$/df = 2.399

The data was then, modified based on the modification indices feature in the AMOS software (v26). The modification indices feature suggested a number of variables that can be covaried to optimize the model indicators. Based on the suggestions, these variables were covaried from Performance Construct: EP6-EP7, EP4-EP6, EP2-EP6, EP3-EP4, ED1-ED3, ED2-ED4, ED2-ED7, ED3-ED4, ED4-ED7, ED7-ED8, ED2-ED9, ED3-ED7, ED4-ED10 and ED9-ED11. After these few modifications, the overall model was statistically of good model fit for further analysis with the following model fit indicator values: Chi-square = 974.064, Degree of freedom = 406, Probability level = 0.000, $\square^2$/df = 2.399, CFI = 0.910, IFI = 0.911, RMSEA = 0.069, PCLOSE = 0.000 and Standardized RMR = .0752.

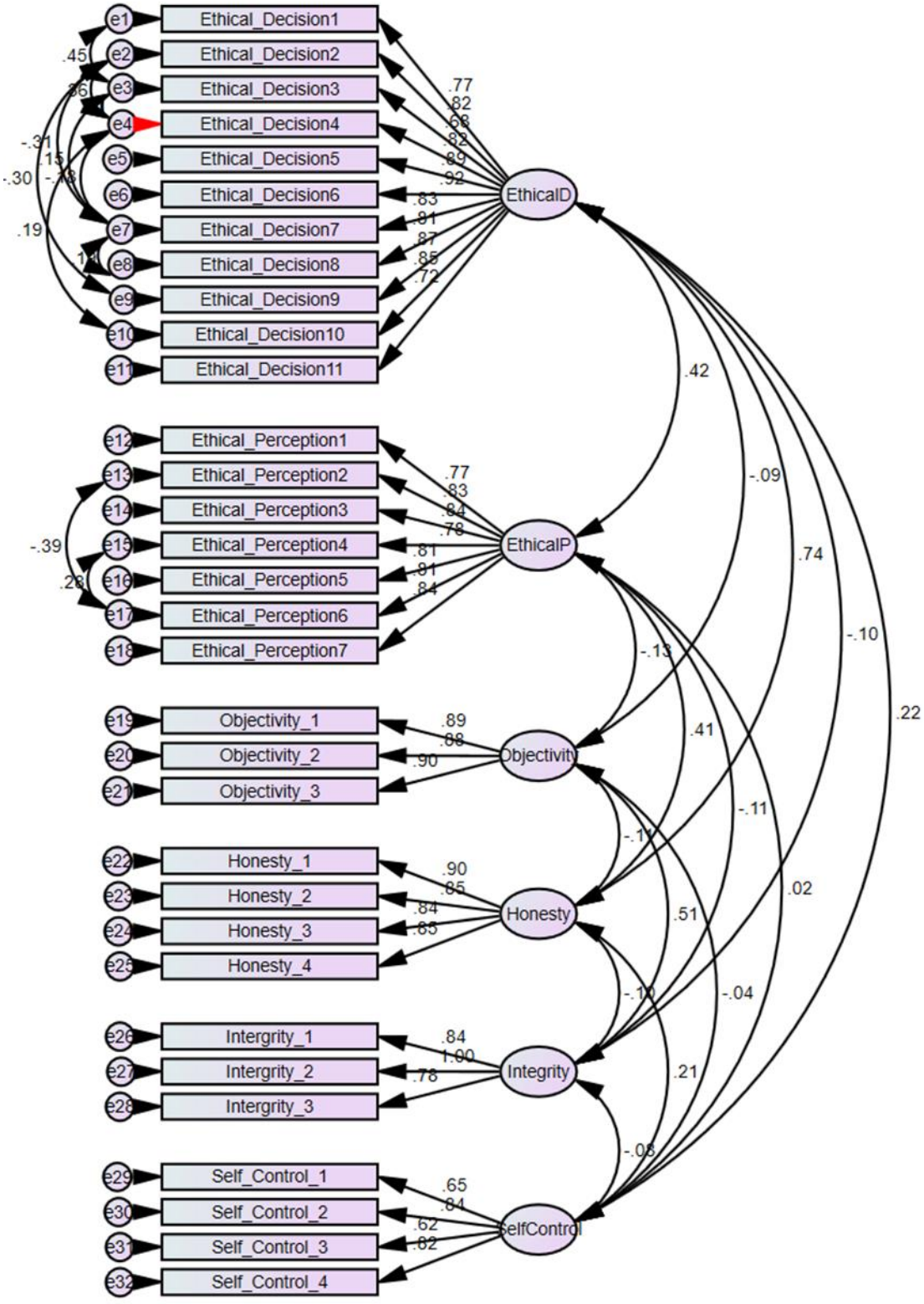
Impacts on the main constructs of this study

In the updated model, there were 496 different sample moments, 90 distinct parameters to estimate, and 406 degrees of freedom. In this case, the test was done with a confidence level of 5%. The summary results showed an estimated variance of 37.00 percent for objectivity, integrity, honesty, self-control, ethical perception and ethical decisions. So, ethical perception has a 63.00 percent error variance. As seen in Table 6, all of the model fit indices met the specified levels.

CFA Initial Model



CFA Model after Modification



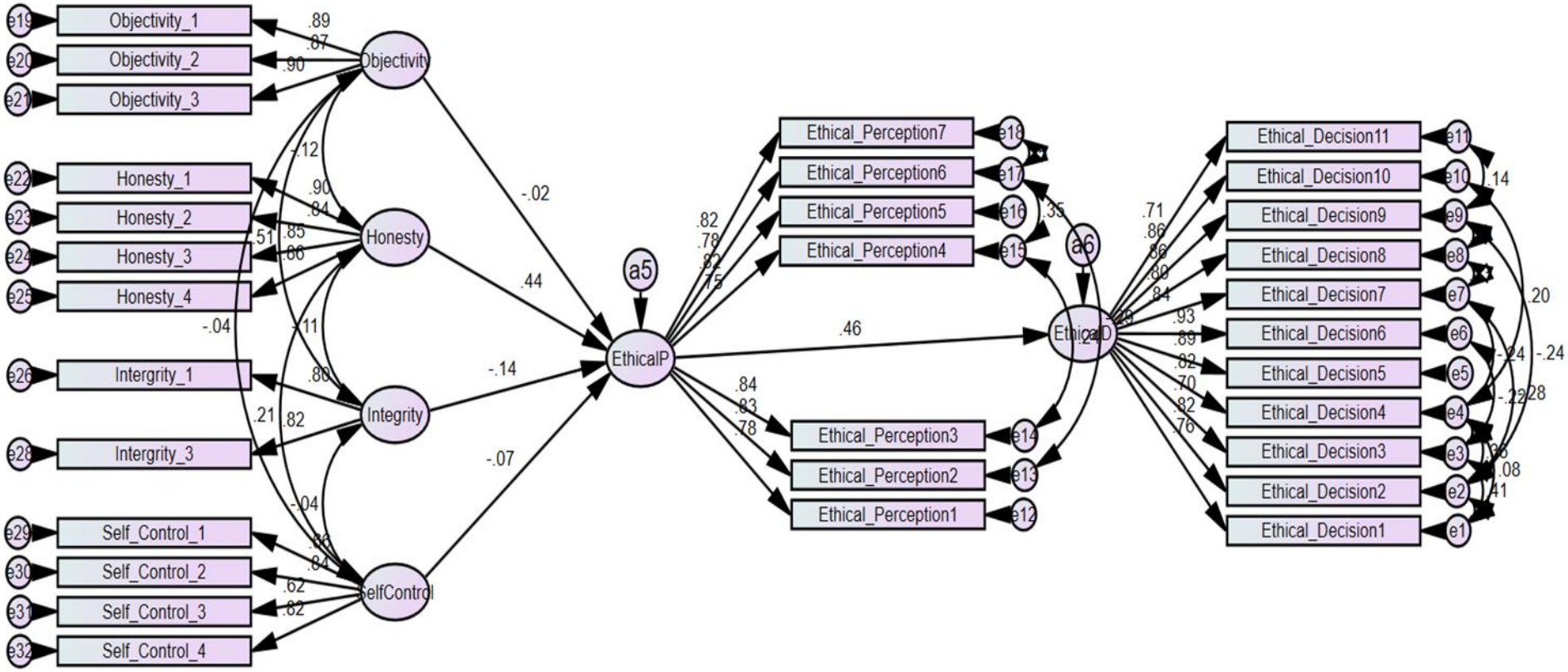

Objectivity_1
Objectivity_2
Objectivity_3
Honesty_1
Honesty_2
Honesty_3
Honesty_4
Intergrity_1
Intergrity_3
Self_Control_1
Self_Control_2
Self_Control_3
Self_Control_4
Objectivity
Honesty
Integrity
SelfControl
EthicalP
a5
a6
Ethical_Perception7
Ethical_Perception6
Ethical_Perception5
Ethical_Perception4
Ethical_Perception3
Ethical_Perception2
Ethical_Perception1
Ethical_Decision11
Ethical_Decision10
Ethical_Decision9
Ethical_Decision8
Ethical_Decision7
Ethical_Decision6
Ethical_Decision5
Ethical_Decision4
Ethical_Decision3
Ethical_Decision2
Ethical_Decision1

Table 7: Unstandardized parameter estimates of the hypothesized paths

Relationships			Estimate	SE.	CR.	p-value
Ethical Perception	<---	Objectivity	-.015	.061	-.254	.800**
Ethical Perception	<---	Honesty	.413	.066	6.282	.028**
Ethical Perception	<---	Integrity	-.131	.079	-1.657	.098**
Ethical Perception	<---	Self-Control	-.097	.096	-1.016	.309**
Ethical Decision	<---	Ethical Perception	.427	.065	6.549	.0073*

Maximum Likelihood Estimator (MLE)

Significant at $p < 0.05$

The first hypothesis was to examine the significant effect of objectivity on ethical perceptions of teachers. From the results above, objectivity has statistically insignificant negative effect on ethical perceptions of teachers (β =-0.015, SE.=0.061, p=0.800; n=248). The second hypothesis was to examine the significant effect of integrity on ethical perceptions of teachers. From the results above, integrity has statistically significant negative effect on ethical perceptions of teachers (β =-0.131, SE.=0.079, p<0.1, n=248). The third hypothesis was to examine the significant effect of honesty on ethical perceptions of teachers. From the results above, honesty was statistically significant and had positive effect on ethical perceptions of teachers (β =0.413, SE.=0.066, p<0.001; n=248). The fourth hypothesis was to examine the significant effect of self-control on ethical perceptions of teachers. From the results in Table 7, self-control was statistically not significant and had negative effect on ethical perceptions of teachers (β=-0.097, SE.=0.096, p=0.309, n=248). The fifth hypothesis was to examine the significant effect of ethical perception on ethical decisions of teachers. From the results, ethical perception has statistically significant positive effect on ethical decisions of teachers (β=0.427, SE.=0.065, CR=6.549; Sig. 0.007*, p<0.001, n=248).

Table 8: Hypotheses testing

Relationships			Estimate	P-value	Hypothesis	Result
Ethical Perception	<---	Objectivity	-.015	.800	H1	Not Supported
Ethical Perception	<---	Honesty	.413	***	H3	Supported
Ethical Perception	<---	Integrity	-.131	.098	H2	Not Supported
Ethical Perception	<---	Self-Control	-.097	.309	H4	Not Supported

Relationships			Estimate	P-value	Hypothesis	Result
Ethical Decision	<---	Ethical Perception	.427	***	H5	Supported

Maximum Likelihood Estimator (MLE)

Significant at p< 0.05

Tests of mediation

Table 9: Indirect (Mediation) Effects for the hypothesized paths

Variables	Ethical decision	p. value
Objectivity	-.007	.853
Honesty	.176	.003**
Integrity	-.056	.039*
Self-Control	-.042	.234

p < 0.05 *, p < 0.01 **

The study examined the effect of teacher's professional values on their ethical decision through the mediating role of the teacher's ethical perception based on Zhao, Lynch, and Chen's (2010) approach for testing mediation effects. Table 9 shows presents the results. The importance of the indirect effects between the constructs may be determined by evaluating the mediating effects, according to Zhao, Lynch, and Chen (2010). If the indirect paths are significant, the conclusion is that there is a significant mediating influence between the two conceptions; if both direct and indirect paths are significant, a complementary (or partial) mediation is present.

On the basis of teachers' ethical perception, the results in Table 9 indicates that the indirect effect of honesty and integrity on teachers' ethical decisions are significant at the 0.05 level. However, the indirect effect of objectivity and self-control on teachers' ethical decisions are insignificant at the 0.05 level. The results suggest that there is a partial mediation effect of professional values on teacher's ethical decision.

Discussion

It must be noted that ethical professional values, ethical perceptions and decisions of teachers' ethical behavior contribute to individuals who come together to accomplish common goals is a continuing concern for the survival of organizations. In the context of professional values, ethical perceptions and decisions of teachers' ethical behavior, the survival of educational organizations is required ethical behavior and attitude more than ever when today's today conjuncture is considered (Debes, 2021).

Professional values, ethical perceptions and decisions of ethical behavior in educational organization impacts greater emphasis on the actions concerning education and decisions of teachers, therefore, they should decide ethically since their decisions have an influence on school community (Debes, 2021; Webster & Litchka, 2020). Consequently, this makes determining the relationship among

professional values, ethical perceptions and decisions particularly important. The variables must be taken more seriously in schools because teachers not only face ethical problems but they are also responsible for whether next generations will be educated. The role of schools in transforming next generation, responsible decisions made in schools and close relations with the school community are important for people to realize the significance of ethics (Debes, 2021; Webster & Litchka, 2020).

From the study, teachers' professional values, ethical perceptions and decisions of ethical behavior must be taken more seriously in schools because teachers not only face ethical problems but they are also responsible for whether next generations will be educated and moral people. Teachers' professional values, ethical perceptions and decisions of ethical behavior in school puts greater emphasis on the actions concerning education and decisions of teachers (Burakgazi, et al., 2020).

Lending the finding of this study to other related studies, Aybek and Karatas (2016) concluded in their study that the most unethical behaviors teacher candidates encounter are discrimination, humiliation and disrespect. Although the two studies differ from each other with the emphasis of the participants on the concept of roughness in this study, it is a remarkable finding that the act of discrimination appeared in both studies. From university in the United States, Aktan, et al., (2020) found the characteristics of effective teachers in their research with prospective teachers. The study expounded that being student-focused and ethical are among the themes determined in the relevant research. In these themes, students listed the characteristics of effective teachers. They listed traits such as student love, sensitivity, neutrality, non-discrimination, equal treatment, non-prejudice, kindness, compassion and respect.

Similarly, Ye and Law (2019) asserted that teachers should have some moral and ethical principles to promote effective teaching and learning process. Individuals raised as teachers in China are taught ethical principles such as love, respect and treat their students as their children and are asked to adopt them when they become teachers. The results of the research they have already done support this assumption. The prospective teachers think that teachers should have similar characteristics, even in different parts of the world.

Conclusion

The purpose of the study was to examine teachers' professional values, ethical perceptions and ethical decisions in Ghana. As a result, seven specific objectives were developed to support the study. These objectives have been met. The study, concludes that teachers in Ghana value self-control, honesty, integrity and objectivity and this fosters a strong working relationship in public and private; formal and informal. The study found a significant relationship between ethical perception and honesty and integrity. Teachers recognize moral issues and are therefore moral agents.

There was also an insignificant relationship between ethical perception and self-control and the study therefore that concluded teacher's self-control has zero bearing on their ethical perception. However, it is considered ethically right to exercise self-control for conducive work as it is preferable to respond to rage with tolerance relationship in the work place. Moreover, there was a significant positive relationship between ethical decision and ethical perception of teachers. The study

concludes that being ethically conscious as a teacher influences the ethical decisions you make in school.

For indirect effect, honesty and integrity on teachers' ethical decisions mediated by ethical perception are significant at the 0.05 level. It can be concluded that teacher who practice professional values such as honesty and integrity need to consider ethics when and during decision making for the school or the institution they represent. The teachers need to consider honesty and integrity when teaching. Objectivity and self-control on teachers' ethical decisions, mediated by ethical perception are insignificant at the 0.05 level. It can therefore be concluded that though objectivity and self-control are key professional values, they are not a top priority to teachers during ethical decision making in teaching.

Recommendations

Based on the findings of the study, the study recommends that school heads should create a framework in which teachers can test their judgments, complete duties, and communicate with others.

Again, it is recommended that teacher professional values such as integrity, honesty, self-control and objectivity should also be encouraged in order to foster a strong working relationship among teachers in schools. It is also recommended that seminars on professional values and ethics be organized by organizations for their teacher to help them make enhanced ethical decisions.

The findings of the study demonstrate that there is a partial mediation effect of professional values on teachers' ethical decision. As such, it is recommended that future teachers and teaching students should use ethical principles in the teaching profession when making judgments where they are presented with increasing ethical problems in the teaching field. Educators and professors should give ethical training to teaching students as part of their professional socialization process in schools.

Acknowledgements

We would like to thank our anonymous reviewers for their intellectual inspiration, stimulation and constructive criticisms throughout the development of the manuscript. We also express our profound gratitude to our research assistants for assistant offered during data administration.

References

Adekoya, A. C., Oboh, C. S., & Oyewumi, O. R. (2020). Teachers' perception of the factors influencing auditors' ethical behaviour in Nigeria. Heliyon, 6(6), e04271.

Aifuwa, H. O., Embele, K., & Saidu, M. (2018). Ethical teaching practices quality. EPRA Journal of Multidisciplinary Research, 4(12), 31-44.

Aktan, O., Toraman, Ç., & Orakci, S. (2020). Relationships between teachers' professional values, attitudes, and concerns about the profession in Turkey. Issues in Educational Research, 30(2), 397-419.

Alleyne, P., Cadogan-McClean, C., & Harper, A. (2013). Examining personal values and ethical behaviour perceptions between teaching and non-teaching students in the Caribbean. The Teaching Educators' Journal, 2(3), 1-9

Aybek, & Tuğçe K. (2016). "Investigation of Prospective Teacher's Views on Ethics and Professional Ethics." Journal of Research in Education and Teaching, vol. 5, pp. 96- 108.

Barrainkua, I., & Espinosa-Pike, M. (2018). The influence of auditors' professionalism on ethical judgement: Differences among practitioners and postgraduate students. Revista de Contabilidad, 21(2), 176-187.

Barratt, M. J., Ferris, J. A., & Lenton, S. (2015). Hidden populations, online purposive sampling, and external validity: Taking off the blindfold. Field Methods, 27(1), 3-21.

Bebbington, J., Russell, S., & Thomson, I. (2017). Teaching and sustainable development: Reflections and propositions. Critical Perspectives on Teaching, 4(8), 21-34.

Bijani, M., Tehranineshat, B., & Torabizadeh, C. (2019). Nurses', nursing students', and nursing instructors' perceptions of professional values: a comparative study. Nursing Ethics, 26(3), 870-883.

Bollen, K. A. (1990). Overall fit in covariance structure models: Two types of sample size effects. Psychological Bulletin, 107(2), 256.

Brand, S. (2009). Crohn's disease: Th1, Th17 or both? The change of a paradigm: new immunological and genetic insights implicate Th17 cells in the pathogenesis of Crohn's disease. Gut, 58(8), 1152-1167.

Burakgazi, S. G., Can, I., & Coskun, M. (2020). Exploring Pre-Service Teachers' Perceptions about Professional Ethics in Teaching: Do Gender, Major, and Academic Achievement Matter?. International Journal of Progressive Education, 16(4), 213-228.

Byrne, B. M. (2001). Structural equation modeling with AMOS, EQS, and LISREL: Comparative approaches to testing for the factorial validity of a measuring instrument. International Journal of Testing, 1(1), 55-86.

Chen, Q., Su, X., Liu, S., Miao, K., & Fang, H. (2021). The relationship between moral sensitivity and professional values and ethical decision-making in nursing students. Nurse education today, 105, 105056.

Creswell, J. W. (2014). Qualitative, quantitative and mixed methods approaches. Sage Publications

Debes, G. (2021). Teachers' and Administrators' Perception about the Concepts of" Ethical Behavior" and" Attitude". International Journal of Curriculum and Instruction, 13(1), 756-772.

Enchil, C. B. (2019). Ethical Perceptions of Teachers in Ghana: The Influence of Individual Factors and Personal Values (Doctoral dissertation, University of Ghana).

Enkavi, A. Z., Eisenberg, I. W., Bissett, P. G., Mazza, G. L., MacKinnon, D. P., Marsch, L. A., & Poldrack, R. A. (2019). Large-scale analysis of test–retest reliabilities of self-regulation measures. Proceedings of the National Academy of Sciences, 116(12), 5472-5477.

Espinosa-Pike, M., & Barrainkua, I. (2020). Professional teachers in Spain: a comparative study of ethical and professional values. Spanish Journal of Finance and Teaching/Revista Española de Financiación y Contabilidad, 49(2), 234-264.

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. American Journal of Theoretical and Applied Statistics, 5(1), 1-4.

Felton, S., Dimnik, T., & Bay, D. (2008). Perceptions of teachers' ethics: evidence from their portrayal in cinema. Journal of Ethics, 83(2), 217-232.

Ferrell, O. C., & Fraedrich, J. (2021). Teaching ethics: Ethical decision making and cases. Cengage Learning.

Flanagan, J., & Clarke, K. (2007). Beyond a code of professional ethics: A holistic model of ethical decision - making for teachers. Abacus, 43(4), 488-518.

Gaffikin, M., & Lindawati, A. S. L. (2012). The moral reasoning of public teachers in the development of a code of ethics: the case of Indonesia. Australasian Teaching, Business and Finance Journal, 6(1), 3-28.

Hair Jr, J. F., Sarstedt, M., Ringle, C. M., Smith, D., & Reams, R., (2014). Partial least squares structural equation modeling (PLS-SEM): A useful tool for researchers. Journal of Teaching Strategy, 5(1), 105-115.

Hair, J. F., Ortinau, D. J., & Harrison, D. E. (2010). Essentials of marketing research (Vol. 2). New York, NY: McGraw-Hill/Irwin.

Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. Structural Equation Modeling: A Multidisciplinary Journal, 6(1), 1-55.

International Ethics Standards Board for Teachers (IESBA). (2013). Handbook of the code of ethics for professional teachers. New York: IFAC.

Jaijairam, P. (2017). Ethics in Teaching. Journal of Finance and Teaching, 2(3), 1-13.

Johnson, R. A., & Wichern, D. W. (2014). Applied multivariate statistical analysis (Vol. 6). London, UK: Pearson.

Jones, T. M. (2021). Ethical decision making by individuals in organizations: An issue-contingent model. Academy of Management Review, 16(2), 366-395.

Kankam, P. K. (2019). The use of paradigms in information research. Library & Information Science Research, 41(2), 85-92.

Kline, R. B. (2015). Principles and practice of structural equation modeling. Guilford Publications.

Lapteş, R. (2019). Ethics and integrity of the professional teacher. Bulletin of the Transilvania University of Brasov. Economic Sciences. Series V, 12(2), 87-92.

Lubis, A. S. (2021). The Effect of Accountability, Competency, Professionalism, Integrity and Objectivity of Public Teaching on Audit Quality with Independence as Moderating Variables (Empirical Studies in Medan City Public Teacher). International Journal of Public Budgeting, Teaching and Finance, 4(1), 1-13.

Marsh, H. W., & Hocevar, D. (1985). Application of confirmatory factor analysis to the study of self-concept: First-and higher order factor models and their invariance across groups. Psychological Bulletin, 97(3), 562.

Mbawuni, J. (2015). Examining students' feelings and perceptions of teaching profession in a developing Country: The role of gender and student category. International Education Studies, 8(6), 9-23.

Mensah-Onumah, Simpson, S. N. Y., & Kwarteng, A. (2021). The effects of ethics education interventions on ethical attitudes of professional teachers: evidence from Ghana. Teaching Education, 7(2), 1-25.

Mubaraq, S., Abdulrasaq, M., & Saidu, M. (2019). Ethical working practices: Evidence from listed firms in Nigeria. Teaching & Taxation Review, 3(2), 1-9.

Narasimhan, R., & Jayaram, J. (1998). Causal linkages in supply chain management: an exploratory study of North American manufacturing firms. Decision sciences, 29(3), 579-605.

Ningrum, G. S., & Wedari, L. K. (2017). Impact of Auditor's Work Experience, Independence, Objectivity, Integrity, Competency and Accountability on Audit Quality. Journal Economics & Business Atmajaya Indonesia, 1(1), 19-33.

Noval, L. J., & Stahl, G. K. (2017). Teaching for proscriptive and prescriptive morality in the workplace: The double-edged sword effect of mood on managerial ethical decision making. Journal of Ethics, 142(3), 589-602.

Nwanyanwu, L. A. (2018). Teachers' ethics and fraud control in Nigeria: the emergence of a fraud control model.

Oboh, C. S. (2019). Personal and moral intensity determinants of ethical decision-making: a study of teaching professionals in Nigeria. Journal of Teaching in Emerging Economies, 3(6), 1-28

Odar, M., Jerman, M., Jamnik, A., & Kavčič, S. (2017). Teachers' ethical perceptions from several perspectives: evidence from Slovenia. Economic Research-Ekonomska Istraživanja, 30(1), 1785-1803.

Onumah, R. M., Simpson, S. N. Y., & Kwarteng, A. (2021). The effects of ethics education interventions on ethical attitudes of professional teachers: evidence from Ghana. Teaching Education, 4(3), 1-25.

Pallant, J. F. (2011). Development and validation of a scale to measure perceived control of internal states. Journal of Personality Assessment, 75(2), 308-337.

Prayoga, I., & Afrizal, T. (2021). Perceptions of Educators, Teaching Students and Teachers Public Teacher against Ethics of Financial Statement Preparation (Studies at University and KAP in Semarang). Budapest International Research and Critics Institute-Journal (BIRCI-Journal), 89-101.

Rahi, S. (2017). Research design and methods: A systematic review of research paradigms, sampling issues and instruments development. International Journal of Economics & Management Sciences, 6(2), 1-5.

Rossouw, D., Prozesky, M., du Plessis, C., & Prinsloo, F. (2010). Ethics for teachers & auditors. OUP Catalogue.

Saunders, M., Lewis, P., & Thornhill, A. (2009). Research methods for students. Pearson Education.

Sayidah, N., Hartati, S. J., Winedar, M., Assagaf, A., & Muhajir, M. (2020). Clarification of Honesty Value in the Learning Process of Forensic Teaching and Investigative Auditing. International Journal of Innovation, Creativity, and Change., 13(7), 1210-1228.

Sepasi, S. (2019). Teaching Ethics. International Journal of Ethics and Society, 1(2), 23-29.

Small, R., Smidt, L., & Moola-Yasseen, M. (2017). Ethics and integrity of a professional teacher. Professional Teacher, 17(30), 10-11.

Sui, L., Sun, L., & Geyfman, V. (2021). An assessment of the effects of mental teaching on overspending behaviour: An empirical study. International Journal of Consumer Studies, 45(2), 221-234.

Suradi, A. (2019). The effect of self-control, learning behavior, emotional intelligence, and spiritual intelligence on the level of teaching understanding at Ahmad Dahlan University Yogyakarta (Doctoral dissertation, Universitas Ahmad Dahlan).

Tabachnick, B. G., Fidell, L. S., & Ullman, J. B. (2007). Using multivariate statistics (Vol. 5, pp. 481-498). Boston, MA: Pearson.

Teddlie, C., & Yu, F. (2017). Mixed methods sampling: A typology with examples. Journal of Mixed Methods Research, 1(1), 77-100.

Tehranineshat, B., Torabizadeh, C., & Bijani, M. (2020). A study of the relationship between professional values and ethical climate and nurses' professional quality of life in Iran. International journal of Nursing Sciences, 7(3), 313-319.

Turyakira, P. K. (2018). Ethical practices of small and medium-sized enterprises in developing countries: Literature analysis. South African Journal of Economic and Management Sciences, 21(1), 1-7.

Webster, K., & Litchka, P. (2020). Planning for Effective School Leadership: Teachers' Perceptions of the Leadership Skills and Ethical Behaviors of School Principals. Educational Planning, 27(1), 31-47.

West, A. (2017). The ethics of professional teachers: an Aristotelian perspective. Teaching, Auditing & Accountability Journal, 1(6), 1-20

West, A., & Buckby, S. (2020). Ethics education in the qualification of professional teachers: Insights from Australia and New Zealand. Journal of Teaching Ethics, 164(1), 61-80.

Ye, & Wing-Wah., L. (2019). Pre-service Teachers' Perceptions of Teacher Morality in China." Teaching and Teacher Education, 8(6), 1-9.

Zhao, X., Lynch Jr, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. Journal of Consumer Research, 37(2), 197-206.