

Sense Of Competence, Self-Control, Moral Compass And Academic Cheating: A Mediation Analysis

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ABSTRACT

Academic cheating has been a persistent problem in Kenya's education system. Heavy financial and human capital investments have not succeeded in eliminating the vice as cases of secondary school students engaging in it are still being reported. The present research study sought to find the interplay between sense of competence, self-control, moral compass and academic cheating. It adopted correlational and explanatory sequential research design. All 4,414 form four students from three selected sub counties in Baringo constituted the accessible population. Purposive, stratified and systematic sampling was carried out to select three sub-counties, 10 schools and 396 respondents (203 female; 193 male. Results from standard multiple regression found that the three predictor variables significantly predicted academic cheating ($F(4,391) = 9.05, p < .001$) with the model accounting for 21.7% of variance. Mediation analysis disclosed that self-control, respectively fully and partially mediated the relationship between moral compass, sense of competence and academic cheating. Further, the direct effects of moral compass on academic cheating were less potent compared to its indirect effects. It was concluded that sense of competence, self-control and moral compass play a key role in predicting one's engagement in academic cheating. It was therefore recommended that all stakeholders come together to foster students sense of competence, self-control together with moral compass which in turn may assist in reducing incidences of academic cheating.

Date of Submission: 21-08-2023

Date of Acceptance: 31-08-2023

I. INTRODUCTION

Academic honesty is the bedrock of learning and educational institutions (McKenzie, 2018). This means that if the foundation is weakened through cheating, the system may collapse. Maheka (2015) observed that cheating threatens the credibility of national examination and their outcomes. This suggests that the society may start doubting the grades that students obtain from an examination. In addition, those found engaging in it may not only be prosecuted, they also have their examination results withheld.

Ahmed (2018) and Ives et al. (2016) stated that cheating in academics is a rampant problem around the world. Ahmad et al. (2020) asserted that it is a worldwide challenge that afflicts the education system. In Kenya, high incidences of cheating related to leakages and other illegal behaviours in the year 2015 secondary school national examinations led to the disbandment of the Kenya National Examinations Council (KNEC) board in 2016. Taaliu (2017) opined that the poor performance witnessed in the results of 2017 Kenya Certificate of Secondary Education (KCSE) examinations imply that all along students have been engaging in cheating. In Baringo County, out of the 1205 students whose KCSE results were cancelled in 2017, 31 of them came from one examination center (Kangogo, 2017). Consequently, six teachers and nine boys were arraigned in Kabarnet law court for engaging in examination mischief (Kangogo, 2017).

In lieu of the foregoing, the present study aimed at investigating the degree of relationship that could be present between sense of competence, self-control, moral compass and academic cheating. It also sought to establish the role of self-control in mediating the relationship between sense of competence, moral compass and academic cheating. Earlier studies in developed nations established that sense of competence, self-control and moral compass are crucial in predicting one's engagement in academic cheating. For instance, Szabo and Underwood (2004) observed that competence or lack of it makes students see cheating as the only way out. This implies students who feel incompetent in an academic task may copy assignments from their colleagues.

Thus, if sense of competence is fostered, such that students no longer feel the threat of an academic task, cases of cheating may be reduced (Hendricks et al., 2011).

Self-control has also been mentioned as a key predictor of crime and criminality. According to Gottfredson and Hirschi (1990), self-control is the sole reason why people engage in acts of lawlessness. Kalia and Kumar (2015) stated that low capacities for self-control inversely correlated with academic cheating. While Williams and Williams (2012) found a weak relationship between self-control and academic cheating among British Columbia university students, another study in USA by Bolin (2004) reported no direct effect but mediated one through opportunity. In addition, Freiburger et al. (2017) found an indirect relationship between morality and dishonest behaviours in academics. Specifically self-control association with cheating was explained by student's perception of wrongfulness of the dishonest behavior. Therefore, this study provided an opportunity for clarity on these relationships.

Further, it was envisioned that a deviation from the moral compass (values and principles that an individual holds) makes students become unreliable and irresponsible hence engage in academic cheating. Such students' tend to believe in the common adage that 'the end justifies the means' implying that getting a good grade is of more importance to them even if the process involves cheating.

Objectives of the study

The objectives of this research were:

- i. To establish the relationship between sense of competence, self-control, moral compass and academic cheating.
- ii. To find out the extent to which self-control mediate the relationship between sense of competence, moral compass and academic cheating.

Significance of the Study

Students could be empowered by the results of the current study with information concerning the consequences of cheating and the importance of the predictor variables. For instance, students may use information regarding self-control to focus on long-term goals rather than immediate allures of academic cheating. Teachers may use the knowledge obtained to help in guiding their students towards integrity by adequately preparing students in their academic tasks thus fostering their sense of competence, self-restraint and adherence to the laid down moral values. It may also assist parents to teach their children of the importance of upholding values. Moreover, the Ministry of Education may also use this study to come up with guidelines geared towards taming academic cheating. The results gleaned may be put to use in advancing the body of knowledge with respect to sense of competence, self-control in addition to moral compass and academic cheating from an African context. In addition, it could provide a more contextual approach to the study in Kenya as opposed to the studies done in Europe, America and Canada.

Delimitations of the Study

The following delimitations were made.

- i. Final year students in public boarding secondary schools.
- ii. Students attending private and day only schools were not included in this study.
- iii. Self-reported questionnaires
- iv. Correlation research design
- v. Boarding schools with a population not less than 45.

Hypotheses

The following hypotheses of the study were made:

H₀₁: There is no statistically significant relationship between sense of competence, self-control, moral compass and academic cheating.

H₀₂: Self-control does not mediate the relationship between moral compass, sense of competence and academic cheating.

II. LITERATURE REVIEW

In an online study by Baran and Jonason (2020) on the part played by psychopathy and self-efficacy on deceptiveness in academics among 390 university students (74% female) in Poland with an average age of 23 years, it was noted that the indirect effect of disinhibition on academic cheating was moderated by overall beliefs in one's capability by way of mastery goal orientation. They reported that respondents who appraise themselves high in terms of perceived capacities to manage their prospects of success or failing might be capable of conquering their propensity to commit academic transgressions emanating from high impulsiveness. Baran and Jonason's study used a self-report questionnaire to obtain its data. Also, their sampling method could

have led to the biased sample as 74% were female. The current study used robust sampling procedures which yielded a balanced sample. In addition, Baran and Jonason study was done among undergraduate students in Poland contrary to what present study made use of.

Rua et al. (2016) carried out two online studies regarding ethical desire and self-control in relation to enactment of ethical behaviours among 145(54% male) and 85(47% male) students in North Eastern University, USA aged 19.69 years. The respondents were required give information regarding ethical behaviours of employees as well as managers in organizations. The interconnection between moral identity and ethical behavior was enabled through self-control. In other words, the capacity of one behaving morally was reported to depend on self-control. Since their study considered behaviours enacted in work environments by respondents who themselves are not employees, their findings may not be conclusive. The present study targeted behaviours committed by individual respondents.

In Africa, Cornelius-Ukpepi et al. (2012) studied the correlates of examination misconduct among a stratified sample of 1818 elementary school going children in Cross River state, Nigeria. The sample was chosen from 34986 male and 33805 female children. It was established that respondents low in morality and self-efficacy had increased tendencies of exhibiting cheating behaviours. The contemporary research focuses on finding the views of secondary school students in Kenya.

In Kenya, Waweru (2020) interviewed 30-50 chaplains and undergraduate students in two (one private and one public) universities in Uasin Gishu County on their ethical thoughts regarding examination cheating. Deficiencies in self-control, confidence and defective moral upbringing were reported to contribute to dishonest behaviours. Interview method of collecting data used may impact objectivity of the responses given. To insure against possible method bias in the present study, anonymity of the respondents was stressed.

Presently, Kenya's 8-4-4 education system which was focused on exams has been replaced with CBC. Though CBC implementation is not fully complete, a review on its attributes by Mauki et al. (2020) pointed out that the new curriculum focuses on change of pedagogy, skill acquisition and performance and less on emotional intelligence and ethics. The current study not only investigated the extent of relationship between sense of competence and academic cheating, it also sought to establish the interrelationship between sense of competence, self-control, moral compass and academic cheating.

In brief, the objective was to establish a combined interconnection between predictor variables, academic cheating and the mediating role of self-control. The literature reviewed showed that there was no single study that combined the three variables together. Nonetheless, some researches established that the predictor variables were related to academic cheating through other variables unrelated to the current study.

III. METHODOLOGY

A correlational design was adopted in the present study. Correlational design was deemed ideal because the center of interest was in establishing magnitude of relationship linking predictor and outcome variables. According to Creswell (2012), when the measurement of the degree of association between two or more variables is required, then, correlational design is appropriate. In support, Sorensen et al. (2010) pointed out that correlational design gives information concerning the magnitude of relationships among study variables.

All final year students of the year 2019 who were in public boarding schools in Baringo County formed the target population. Their selection was done using purposive sampling approach. To ensure inclusion of subgroups within the population, stratified random sampling was used. McQueen and Knussen (2014) stated that the approach ensures minorities in a population are included in the sample. In line with the aforementioned, the technique ensured that all students in diverse category of schools have a chance of inclusion in the sample. It involved listing of all public boarding schools in a specific sub county and grouping them based on their school type. Also, for a school to qualify for inclusion in the subgroups, it should have a population of at least 45 form four students. As a consequence of this process, four single sex girls' only and four single sex boys' only schools were selected. In addition, because there were few coeducational schools, only two co-educational were chosen.

Finally, to achieve sufficient and representative sample, 45 participants per school were chosen systematically. The number was arrived at based on Ndethiu et al. (2016) who stated that class sizes in Kenya range from 40 to 59 students. Initially, it involved obtaining the class register containing names and identification numbers of all form four students in the school. From the list, the first respondent was selected at random, thereafter, a fixed interval commensurate with the total number of students in a specific school and was used to recruit other respondents. This procedure guaranteed that the opportunity of every individual within the population to be chosen into the sample is equal.

The main research tools for data collection in this study were questionnaires. Gall et al. (2003) and Mertens (2010) submitted that such instruments are easy and inexpensive to use. The questionnaire was divided into four parts. The scale measuring sense of competence scale had 10 items adapted from Harter (2012) scale.

The scale was also deemed appropriate because the author, through several studies, found that the scale was reliable. For instance, in the original scale, the findings returned alpha value of .76 for Scholastic competence and .83 for athletic competence. Self-control scale developed by Grasmick (1993) was adapted. The scale was a five point Likert-type with 24 items estimating six elements of self-control as theorized by Gottfredson and Hirschi (1990). The rating employed started from ‘strongly agree’ to ‘strongly disagree’.

Collection of information about moral compass was done using an adapted version of Lennick and Kiel’s (2005) moral competence inventory. The instrument was a five point Likert scale beginning with 1 = ‘strongly disagree’ to 5 = ‘strongly agree’. The scale was made up of 30 items measuring four dimensions of moral compass: integrity; responsibility; compassion; and forgiveness. In this study, scoring was done by adding up entries of each respondent to obtain a moral compass score. The scores obtained ranged from 30 to a maximum of 150.

Part of Midgley’s et al. (2000) Patterns of Adaptive Learning Scale containing statements associated with academic cheating was adapted and utilized in this study. The author had granted permission to use this subscale. Sample item include “I sometimes cheat in my classwork”. The instrument had five items with scores ranging from *never, rarely, sometimes, often* and *very often*.

IV. RESULTS AND DISCUSSION

Descriptive Statistics

A total of 396 students returned usable questionnaires representing a return rate of 88%. The number of female respondents was 203(51.3%) with a mean age in years of 17.28 while 193 (48.7%) were male aged 18.05 years. The descriptive statistics on methods of academic cheating indicated that the average score for the items varied from 0.30 (*SD* =0.81) to 1.77 (*SD* = 1.15). The results are outlined in Table 1.

Table 1
Averages for Methods of Academic cheating

Practices of Academic cheating	<i>M</i>		<i>SD</i>
Copying from others	0.73		0.94
Copy A. from textbooks	1.77		1.15
Copy A. from others	0.91		1.05
Copy from sneaked notes	0.52		0.97
Help classmate cheat	0.30		0.81

Note. *N* = 396; *M* = mean; *SD* = standard deviation; A = assignment; skewness = 1.51; kurtosis = 2.96

From Table 1, majority of the students rated most items in academic cheating scale as low. Copying assignments from textbooks and copying assignments from other students’ work were rated higher than the others. It was followed by copying from other students during a test. Very few students assisted their colleagues in committing academic dishonest acts [*M* = 0.30 (*SD* = 0.81)] cheat. The overall mean was 0.85 (*SD* = 0.98) implying that rated academic cheating scale as low. The possible reason could be that students fear reporting their engagement in academic cheating. Academic cheating is deemed a risk behavior as it previously placed students in Western Kenya under security watch (Citizen TV Kenya, 2018). The results compare with the findings of Saana et al. (2016) on perception of students regarding involvement in cheating among college students in Wa, Ghana. In that study, the mean scores for cheating methods ranged from 1.17 to 2.09 out of four.

Hypothesis Testing

H₀₁: There is no significant relationship between Sense of Competence, Self-control, Moral Compass and Academic cheating

The study sought to establish whether sense of competence, self-control, moral compass jointly related to academic cheating. Performance of standard multiple regression analysis to test this objective was done. This initially involved testing whether the assumptions for performing the analysis were met. Table 2 revealed a small correlation coefficient between predictor variables. The highest correlation was between moral compass and self-control. Thus, the assumption appertaining multicollinearity was not breached.

Table 2
Mean and Intercorrelations for Predictor and Outcome Variables

Variable	M	SD	1	2	3
1. SC	81.77	13.32	-		
2. SoC	25.45	5.55	.21**	-	
3. MC	109.30	10.69	.32**	.12*	-
AC	4.23	3.40	-.42**	-.27**	-.22**

Note: N = 396; AC = Academic cheating; SC= self-control; SoC= sense of competence.; MC= moral compass; **correlation is significant at the 0.01 level; *correlation is significant at the 0.05 level (2-tailed)

All predictor variables as conveyed in Table 2, significantly predicted academic cheating. Further, all the three outcome variables are shown to have a weak to moderate correlation with one another. For example, the correlation between self-control and moral compass (.32) was highest while sense of competence and moral compass (.12) was least correlated. From the foregoing, a conclusion was made that there was no major deviation from normality.

Further, Table 3 revealed that the tolerance values for sense of competence, self-control and moral compass (0.954, 0.869, and 0.895) were quite respectable as they were close to one. Values near to zero indicate high correlation among variables suggesting multicollinearity violation (Pallant, 2001). Also, normality was tested by the inspection of normal probability plot which indicated that the points lied relatively along a relatively straight diagonal line starting at the bottom left side to top right. Further, an inspection of the scatterplot of residuals showed that a considerable number of scores were concentrated in the center indicating no clear pattern. After ascertaining the assumptions, the outcome of standard multiple regression analysis done as reported in Table 3.

Table 3
Regression Analysis Results for Self-control, Sense of Competence, Moral Compass and Academic cheating

Model	β	SE	Std. β	t	Sig.	Tolerance
Constant	17.28	1.69		10.25	0.000	
SC	-0.09	0.01	-0.36	-7.5	0.000	.869
SoC	-0.11	0.03	-0.18	-3.97	0.000	.954
MC	-0.03	0.02	-0.08	-1.66	0.099	.895

Note. N =396; R = .465; R²= 0.217; F (3,392) = 36.13, p < 0.001; β = beta; SE= standard error; SC = self-control; SoC= sense of competence; MC =moral compass

The combination of variables as shown in Table 3 significantly determined academic cheating ($F(3,392) = 36.13, p < .001$). Thus, the null hypothesis failed to be accepted. The negative beta values imply that when a predictor variable increases, academic cheating decreases. For example, an increase in self-control translates to a decline in academic cheating. Also, despite all the predictor variables combined significantly predicting academic cheating, moral compass was not a significant contributor when the two other predictors are considered (moral compass $\beta = -.08, t = -1.66, p > .05$). Sense of competence and self-control contributed $\beta = -.18$ and $\beta = -.36$ of variance respectively. The beta weights suggest that self-control, relative to the other variables, was the most significant negative contributor to academic cheating (Std. $\beta = -.36, t = -7.5, p = .000$). This was followed by sense of competence (Std. $\beta = -.18, t = -3.965, p = .000$). This implies that, a unit rise in self-control was correlated to -.36 drop in academic cheating. Similarly, for a unit surge in sense of competence, academic cheating declined by -.18. Moral compass was an insignificant determinant of academic cheating when self-control and sense of competence are controlled. Moreover, the adjusted R value was 0.465 and R² was .217. This implies that the predictor variables explained 21.7% of variance in academic cheating. This yielded the contribution of each variable on academic cheating as stated in equation 1:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon \dots \dots \dots \text{Equation 1}$$

Where;

Y = Academic cheating

β_0 = Regression constant

$\beta_1 - 3$ = Coefficients of variables

X₁ = Sense of competence

X₂ = Self control

X₃ = Moral compass

ϵ = Error constant

The consequent model for predicting academic cheating from self-control, sense of competence and moral compass was:

$Y = 17.28 - 0.36SC - 0.18SoC$ Equation 2.

Where; Y = academic cheating, SC = self-control, SoC = sense of competence

Further regression analysis was carried out to find how each predictor variable contributed to academic cheating. The results are presented in Table 4.

Table 4
Results of Regression for the Unique Contribution of Predictor Variables to Academic cheating

Model	β	R	R ²	SEE	F
SoC	-.27	.27	.07	3.28	29.70
SC	-.42	.42	.178	3.09	85.36
MC	-.22	.22	.046	3.33	19.10

Note. N = 396; p < 0.05; SEE = standard error of estimate; SoC= sense of competence; SC= self-control; MC = moral compass

Based on the outcome in Table 4, the predictor variables explained the following variances in academic cheating: Sense of competence = 7%; Self-control = 17.8%; and Moral compass = 4.6%. In brief, self-control explained much variance whereas moral compass explained the least variance in academic cheating. Table 4 confirms the initial results in Table 3 where apart from all predictors having an association to academic cheating, self-control was shown to be the main contributor to enactment of academically dishonesty behaviours.

H₀₂: Self-control does not mediate the relationship between sense of competence, moral compass and academic cheating

The study also sought to establish if self-control elucidates the connection between the sense of competence, moral compass and academic cheating. Mediation analysis was done following Baron and Kenny (1986) approach which first involved running regression analysis between moral compass and the AD. Table 4 showed that the moral compass and academic cheating were significantly related $F(1, 394) = 19.10, p = .000$ ($t = 6.809, p = .000$) with a standard β coefficient of -.22. The second step involved conducting regression analysis between self-control and academic cheating. Table 4 indicated that self-control had a significant relation with academic cheating $F(1, 394) = 85.36, p = .000$ ($t = 13.498, p = .000$) with a β coefficient of -.42, $R^2 = .176$.

The results implied that mediation analysis between moral compass and academic cheating can be computed. This was done by re-running regression analysis adding self-control as displayed on Table 5 and 6.

Table 5
Regression Outcomes for Moral compass

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	11.698	1.718		6.809	.000
Moral compass	-.068	.016	-.215	-4.369	.000

Note. Dependent Variable: Academic cheating

Table 6
Regression Outcomes for Moral Compass with Self-control

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	15.532	1.657		9.371	.000
Moral compass	-.028	.015	-.089	-1.853	.065
Self-control	-.100	.012	-.393	-8.187	.000

Note. Dependent Variable: Academic cheating

Based on Table 5 and 6, the results revealed that the magnitude of relationship between moral compass and academic cheating decreased and became insignificant $F(2, 393) = 44.66, p = .000$ ($t = 9.371, p = .065$) with $\beta = -.089$ (see Table 5 & 6). Thus, a conclusion was arrived at that the association between moral compass and academic cheating was fully mediated by self-control. This suggests that acting according to one's values and principles increases when one is self-controlled. Therefore, the chances of the individual engaging in academic cheating become diminished.

Also, mediation analysis was conducted between sense of competence and AD with self-control being the suspected mediating variable. Zero-order correlation analysis earlier conducted (Table 4) revealed that sense

of competence was related to academic cheating $F(1, 394) = 29.70, p = .000 (t = 10.78, p = .000)$ with a standard β coefficient of $-.27$, thus, mediation analysis can be conducted. Introducing the mediator (self-control) variable, the results of relationship between sense of competence and academic cheating became weak but significant $F(1, 394) = 52.59, p = .000 (t = 14.02, p = .000)$ with a standard β coefficient of $-.19$ as revealed on Table 7.

Table 7:
Regression Outputs for sense of competence with Self-control

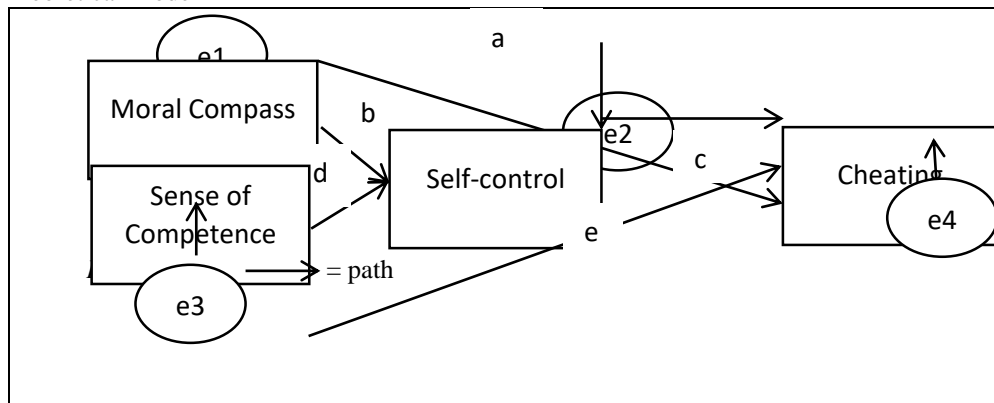
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Constant	15.130	1.079		14.022	.00
competence	-.114	.028	-.186	-4.059	.00
Self-control	-.098	.012	-.384	-8.383	.00

Note. Dependent Variable: Cheating

Based on the results in Table 7, sense of competence was partly associated with academic cheating by its link with self-control.

Since the criteria described by Baron and Kenny (1986) has low statistical power (Preacher & Hayes, 2014), Path analysis was conducted to test the overall model, direct and indirect effects and their significance in addition to their patterns of correlation between predictor and outcome variables. This was done so as to help understand the patterns of correlations among predictor and outcome variables. This yielded figures 1, 2, 3, and 4.

Figure 1
Theoretical Model



Note. Researcher, 2023

The theoretical model (Figure 1) indicates that there could be a possible mediation between moral compass, sense of competence and academic cheating. That is, it was envisaged that self-control mediates the relationship between moral compass, sense of competence and academic cheating. Running path analysis as per the theoretical model resulted to Figure 2.

The results obtained by conducting path analysis in Figure 2 revealed a significant chi-square of 5.69, $p = .017$, and RMSEA = .11 which suggests a non-fit model. However, Ingram et al. (2000) suggested that when the sample is large, non-significance of chi-square is not an issue. They suggested that NFI, CFI, and TLI are better fit indices.

Table 8 gives a summary of these indices.

Table 8
Model Fit Summary

	<i>NFI</i>	<i>RFI</i>	<i>IFI</i>	<i>TLI</i>	<i>CFI</i>
Default model	.964	.783	.970	.814	.969
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Note. *N* = 396; *NFI* = normed fit index; *RFI* = relative fit index; *IFI* = incremental fit index; *TLI* = Tuckey lewis index; *CFI* = comparative fit index

Table 8 revealed that: *NFI* = .96; *CFI* = .97; *TLI* = .81, indicating good fit indices. Ingram et al. (2000) proposed that a *NFI* of .9 or higher indicates a good model fit. This was in line with Tabachnick and Fidell (2013) who emphasized that a value of .95 for *NFI* and *CFI* would be more appropriate. In this study, the good fit indices for *NFI* and *CFI* were above .95 which therefore implies obtained results indicate a good fit model.

The total effects are as represented in Table 9.

Table 9
Standardized Total Effects of Sense of Competence, Moral Compass and Self-Control

Variable	Competence	Moral compass	Self-control
Self-control	.17	.30	.00
Academic cheating	-.24	-.19	-.36

Note. *N* = 396

Results in Table 9 indicate that there were inverse total effects between sense of competence, moral compass, and self-control on academic cheating. This suggests that the predictor variables, together, play a crucial role in determining involvement in academic dishonest behaviours. For instance, total effects of moral compass on academic cheating was -.19 and significant, $p = .000$, 95% CI (-.285, -.086). This implies that when moral compass goes up by one standard deviation, academic cheating reduces by .19 standard deviations. Moreover, sense of competence had significant [$p = .000$, 95% CI (-.285,-.086)] total effects of -.24. This suggests that when sense of competence goes up by one standard deviation, academic cheating diminishes by 0.24.

Table 10 summarizes the direct effects of the predictor variables.

Table 10
Standardized Direct Effects of Sense of Competence, Moral Compass and Self-Control

Variable	Competence	Moral compass	Self-control
Self-control	.17	.37	.00
Academic cheating	-.18	-.08	-.36

Note. *N* = 396

Table 10 indicates that sense of competence, self-control and moral compass had direct effects on academic cheating. The direct effect of moral compass on academic cheating was -.08 but not significant, $p = .144$, 95% CI (-0.178, .025). This implies that other variable like self-control mediates its relationship with academic cheating. The direct effects of sense of competence on academic cheating was -.18 and significant, $p = .000$, 95% CI (-.333, -.150). The results suggest that when sense of competence goes up by one standard deviation, academic cheating goes down by .18 standard deviations.

The indirect effects are as displayed in Table 11.

V. Discussion of the Results

The objective of the research study was to establish the far to which sense of competence, self-control, moral compass collectively predicted academic cheating. It also aimed at finding the extent of interrelationship between predictors and outcome variable. The results on Table 3 revealed that sense of competence, moral compass and self-control had a significant inverse relationship with academic cheating ($F(3,392) = 36.13$, $p < .001$). This implies that holding high feelings of competence, high moral compass and self-control significantly reduced the probability of one participating in academic cheating. It was also revealed that self-control's contribution to academic cheating was highest while moral compass was least. Furthermore, the relationship between moral compass, sense of competence and academic cheating was partly explained by their

relationships with self-control. This corroborates Gottfredson and Hirchi (1990) theory of crime which postulated that the main cause of criminality is self-control.

The results from regression analysis are consonant with the findings of Cornelius-Ukpepi et al. (2012) who found in a study on correlates of test violations among students attending primary schools in Nigeria that low feelings of competence together with low morality predicted involvement in academic cheating. The present study results imply that when an individual in secondary school is not having confidence in his ability to complete a scholastic task as well as not acting according to the principles and values upheld by the society, such persons have increased tendencies of involvement in academic transgressions.

Further, the results that self-control, sense of competence and moral compass altogether predict academic cheating in the current study partly corroborate the findings of Murdock et al. (2007) on consequences of classroom context on undergraduate and graduate students' judgement about academic cheating in Mid-western University, USA. In their two studies, it was outlined that perceived pedagogical competence and morality predicted academic cheating. Specifically, academic cheating was often legitimized when pedagogy was poor than when good and that academic cheating is moral when an individual is a cheater. However, they noted that morality effects were small among undergraduates and none among graduate students. Murdock et al. utilized a sample drawn from universities, secondary school students in Kenya were sampled in the present study.

Comparably, the results of Rundle et al. (2019) in a recent study on the reasons why university students across the world do not engage in contract cheating. They reported that self-control was negatively associated with academic cheating. That is, being self-controlled reduced the chances of a student engaging in academic cheating. On the other hand, they disclosed that students need for competence was a driving force to learning and not engaging in academic cheating. This confirms what was found in the current study where the predictor variables are related to enactment of dishonesty behaviours.

Closely, the results concur with the findings of Murdock et al. (2016) in a literature review on human factors and social conditions in the face of assessment. Murdock et al. stated that impulsivity, thrill seeking, lack of empathy, self-control and low feelings of confidence in academic ability predicted academic cheating. Furthermore, they found that beliefs of acceptability or wrongness of academic cheating were robust predictors of academic cheating behavior. Though Murdock et al. and current study findings were concurrent, the former used secondary data.

Further, the current study results also mirror well with Rua et al.'s (2016) findings in a study on the desire to be virtuous and self-control among 85 university students in North eastern USA. They found that the link between moral identity and ethical behavior was mediated by self-control. They noted that self-control plays a significant role for an individual to continue behaving ethically. Close findings were reported by Gino et al. (2011) in their three studies on how reduced self-control capacities advances unethical behavior among 263 university students in South Eastern USA. They reported that self-control depletion lowers an individual's ability to recognize unethical behavior, thus, are more likely to cheat. In addition, they stated that individuals high in moral identity have an outside chance of cheating than those with low in moral identity.

In the same vein, the results from mediation and path analysis displayed on Figures 1, 2, 3 and 4 showed that sense of competence and moral compass were related to academic cheating via Self-control. That is, self-control partially and fully explained the relationship between sense of competence, moral compass and academic cheating respectively. Moreover, direct and indirect effects of sense of competence on academic cheating were significant whereas only the indirect effects of moral compass were significant.

This result somewhat concur with the findings of Baran and Jonason (2020). In their study, they reported that the association connecting self-control with academic cheating was partly explained by sense of competence. This contrasted with the results of the present study as self-control was found to partially expound the correlation between sense of competence and academic cheating. In other words, the interrelation between sense of competence and academic cheating was to some extent attributed to self-control. This implies that a student who is low in sense of competence but high in self-control may not participate in academic cheating. Baran and Jonason's biased sample could be the reason for the slight difference in results with the current study.

Contrarily, the results of the present study failed to support the findings of Svensson et al. (2010) in a study on the ramifications of self-control along with morality on adolescent offending among secondary school students in Belgium, Netherlands and Sweden. In that study, morality predicted offending in comparison with self-control. On top of that, the consequences of self-control were said to depend on a person's degree of morality. This means that low ability of self-restraint had powerful effect on criminality for adolescents who have lower levels of morality (Svensson et al. 2010). In the present study, self-control contributed more to academic cheating than moral compass. It also fully mediated the interrelationship between moral compass and academic cheating. Additionally, the indirect effects of moral compass were more potent than the direct effects implying that self-control is vital in ensuring that students' actions are consonant with their beliefs, a result

which contrasts the findings of Svensson et al. (2010). The contradictory results could be due to the time difference between Svensson et al.'s study and the ongoing one.

The results partly differed with the findings of Wikström, and Svensson (2010) who established that self-control and being law abiding (moral) determined the likelihood of one engaging in crime. They also found that self-control is essential when one's level of morality is low. The present study found that moral compass was related to academic cheating via its link with self-control. The lack of agreement could be due to the nature of the samples used. For instance, Wikström, and Svensson used a sample of adolescents aged between 14-15 years who could be different from the present study sample who were aged between 16 - 21 years.

Despite the lack of agreement with some past studies, the present study results suggest that sense of competence, self-control and moral compass determine a student's indulgence in academic cheating. More so, self-control, not only predicted academic cheating it also mediated the correlation between sense of competence, moral compass and academic cheating. The results potentially points to the need of fostering the predictor variables under consideration in secondary schools as they may help reduce students' engagement in academic cheating.

VI. SUMMARY

The objective of the research study was establishment of a possible combined relationship between sense of competence, self-control, moral compass and academic cheating. Multiple regression analysis outcomes showed that the predictor variables had a negative significant relationship with academic cheating with the model explaining 21.7% variance. As a consequence, the null hypothesis was rejected meaning that feelings of competence, self-control and moral compass determine the possibility of one engaging in academic cheating. The results also revealed that self-control made the biggest contribution to academic cheating (Std. $\beta = -0.36$), followed by sense of competence (Std. $\beta = -0.18$). Moral compass least contributed to academic cheating (Std. $\beta = -0.08$). From the foregoing, the null hypothesis was rejected implying that sense of competence, self-control and moral compass determine academic cheating. Additionally, moral compass and academic cheating was fully mediated by self-control. Further, the association of sense of competence with academic cheating was partially explained by self-control. Thus, the predictor and outcome variables were found to be interrelated.

VII. CONCLUSION

The evidence adduced also established that sense of competence, self-control, moral compass were related to academic cheating. This is to say that the three predictor variables determined a student involvement in academic cheating. The results imply that feeling competent in an academic task, having self-restraint and living according to principles and values may reduce the probability of engaging in academic cheating. Further, self-control fully explained the relation between moral compass and AD. Thus, it makes sense to conclude that self-control is an integral aspect in ensuring that students act according to laid down principles and values related to academic honesty. This result therefore suggests that for students to live and act according to their principles and values, self-control should be present. This may imply that students who are low in moral compass are not likely to engage in academic cheating if they have high self-control. Further, the study established that sense of competence was partially associated with academic cheating by virtue of self-control. To be specific, the feeling of competence association with academic cheating is partly due to its relationship with self-control.

VIII. RECOMMENDATIONS

The present study recommends that: Students' sense of competence to handle academic tasks needs to be boosted; the curriculum is structured such that students are given a chance for reflection of what they are studying and their responsibilities; and students are assisted to develop ways in which they can control their impulses. Further, the model explained only 21.7% of variance in academic cheating suggesting that there are other variables that lead to academic cheating that require to be investigated.

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