Accuracy of Students' Beliefs about the Frequency of Academic Malpractices

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#### ABSTRACT

Academic malpractices pose a major problem to education in Nigeria. The purpose of this paper was to identify a student factor that might contribute to cheating practices. An empirical study tested the premise that students' beliefs about their peers' cheating behavior influences personal cheating behavior. One hundred and ninety-seven students in the 200-level education program completed a questionnaire reporting their actual cheating behavior and beliefs of their peers' cheating behavior within the past three years. The study found that 69% of the participants engaged in at least one cheating behavior. Participants significantly overestimated the amount of cheating that occurs by their peers. A significant correlation between believed rates of cheating and actual cheating behaviors supported the study's premise. Based on the findings of the study, practical recommendations are made for curbing the rate of academic malpractices in Nigeria.

#### **INTRODUCTION**

Examination malpractice and other forms of cheating have reached endemic portions in Nigeria (Eromosele, 2008). For example, the WAEC, NECO, JAMB, and NABTEB canceled over 50,000 results from SSCE candidates in 2007 (Onyekachijet, 2008). Because of the proliferation of malpractices, the former Minister of State of Education, Dr. Jeremiah Agada, declared a "War Against Examination Malpractice" in 2008 and called on all Nigerians to fight against malpractices in order to improve the standard of education (Wakaso, 2008).

Examination malpractice consists of unethical practices in examinations. However, unethical behaviors in education is not just limited to examinations, but can also include cheating on continuous assessments, plagiarism, and other dishonest practices. Therefore, the term *academic malpractice* is used in this paper to include both examination malpractice and other unethical academic behaviors.

Academic malpractice poses a major threat to Nigerian education on two levels. First, academic malpractice indicates a moral crisis as it signifies dishonesty and corruption among students. If students are engaging in corruption in their formative schooling years, it is a dismal indicator of the type of behaviors that they will engage in when they are full members of society. Second, academic malpractice also presents a quality crisis as it implies that students are passing their courses without knowledge of the content being assessed. Therefore, unqualified students are being awarded certificates and moving to the next level of education or obtaining certificates for professions for which they are ill-equipped.

Because academic malpractice poses a serious threat to education and society at large, educationalists need to identify the factors that influence malpractices in order to develop an effective solution. Many factors have been identified as probable causes of malpractices. Asuru (1996) proposed that the causes of exam malpractice can be categorized as societal factors (e.g., valuing certificates above performance), economic factors (e.g., teachers accepting bribes to supplement low salaries), educational system factors (e.g., lack of facilities), and examinee factors (e.g., fear of failure). Since students' behavior is the foundational issue in academic malpractice, studying examinee factors that influence cheating behaviors is the most direct route to identifying a viable solution to decreasing the rate of academic malpractices in Nigeria.

Peer pressure is hypothesized to influence students' cheating behavior (Asuru, 1996). If students believe that their peers are participating in cheating behaviors, students will be more likely to also participate in these malpractices (McCabe & Trevino, 1997). However, students rarely have direct knowledge of their peers' cheating behavior, but only rumors of cheating practices amongst their colleagues. Instead of being influenced by the *actual* rate of malpractices amongst their colleagues, students are influenced by their *beliefs* of cheating amongst their peers. In other words, a student may *believe* that all of the other students in the class are bringing notes into an exam, but in *reality* only a small proportion of their peers may engage in this practice. Indeed, by listening to newspapers and teachers talk of examination malpractices, it seems that every student in Nigeria is engaged in cheating. It is possible that students and society at large *believe* that more cheating takes place than *actually* occurs.

The purpose of this study is to examine the accuracy of university students' beliefs about the frequency of academic malpractices by measuring the correspondence between students' estimates of peer cheating and the actual reported cheating behavior. The research question asks: What is the actual reported cheating behavior of university students in the 200level education course? To answer this question, students reported the types of cheating behaviors that they have engaged in within the past three years. The first research null hypothesis stated that there is no significant difference between students' beliefs of the rate of cheating amongst their peers and the actual reported rate of cheating. This was examined by asking students to report the percentage of their colleagues whom they thought engaged in each type of cheating behavior within the past three years. The estimates of cheating behavior were then compared with the actual reported rates of cheating using confidence intervals to judge statistical significance. The second research null hypothesis stated that there is no significant relationship between students' beliefs of peer cheating and personal cheating behavior. To test the research hypothesis, students' estimates of peer cheating behavior was averaged to an overall belief score. This belief score was correlated with a total cheating score, calculated as the number of cheating behaviors that a student reported engaging in.

# **RESEARCH METHOD**

#### Research Design

The descriptive research design was selected for this study. Descriptive designs are used to develop careful descriptions of educational phenomenon (Gall, Gall, & Borg, 2003). This research study was designed to carefully describe students' beliefs of academic malpractices and the actual rate of malpractices.

# **Participants**

Four different questionnaires, one of which was the questionnaire for this study, were distributed randomly as continuous assessment course credit to the 850 students enrolled in the educational psychology core course at the University of Jos. Because students randomly received different questionnaires, the participants in this study represent a random selection of all students enrolled in this course. The participants in this study included 197 students in the 200-level education program (55% male, 45% female). Most of the students were admitted to the university through direct entry (47%), while 31% of the students went through the remedial program and 23% were enrolled through UME. The average age of the participants was 24.5 years.

# Instrument

To measure both estimated and actual cheating behavior, 18 different types of cheating behaviors were identified by searching the literature on cheating in Nigeria and conducting pilot study interviews about academic malpractices with current university students and university graduates. See Table 1 for the different types of cheating behavior. To determine students' estimated rate of cheating for each of the 18 types of cheating behaviors, students were asked to indicate the percentage of students in their EDU 202 course whom they thought engaged in that particular type of cheating behavior within the past three years of being in school. The concept of a percentage was explained in the directions, and students were instructed to circle the percentage given in increments of 10% (i.e., 0%, 10%, 20% through 100%). In addition, 0%, 50%, and 100% were labeled with none, half, and all, respectively.

To determine actual cheating behavior, each of these 18 types of cheating behavior were listed a second time. This time, students were asked to indicate if they had personally engaged in each type of cheating behavior within the past three years that they have been in school. After each cheating behavior, students were instructed to circle either Yes or No. *Procedure* 

At the end of a class session, the instructor gave directions for the questionnaires and class representatives distributed the questionnaires to the students. Because students were receiving course credit for completing the questionnaires, they had to list their name and matriculation number on the completed questionnaire. To encourage students to complete the questionnaire honestly, the following procedures were used to assure students that their responses would never be linked to them personally. A solid line was drawn immediately below the area where they were to write their name and matriculation number with the words "Do not write your name below. The top section will be removed upon submission" written in all capital letters. The instructor informed students that as soon as they submitted the

questionnaire, their name and matriculation number would be cut off along the solid line so they would receive credit for completing the questionnaire, but they could not subsequently be linked to their responses. The questionnaires were returned by the students to the instructor within three weeks.

#### RESULTS

The first research question examined the actual reported cheating behavior of 200level education university students. As can be seen from Table 1, 69% of the participants reported engaging in at least one type of cheating behavior. This means that 69% of the students circled "Yes" to at least one type of cheating behavior. While this high proportion is disconcerting, it provides evidence that participants accurately reported the types of cheating behavior that they have engaged in within the previous three years.

The actual percentage of students who indicated that they have engaged in that type of cheating behavior is listed in the first column. The 18 types of cheating behaviors are sorted in Table 1 from the most frequently reported type of cheating behavior (give another student an answer during exam) to the least frequent type of cheating behavior (write notes on body parts or clothing). The types of cheating behavior that were reported most frequently included those that are typically spontaneous, such as placing a script so that a neighbor can read the answer. Indeed, the most serious types of intentional academic malpractices, such as obtaining exam questions before the exam, were only reported by 5% of the sample.

The first research null hypothesis stated that there is no significant difference between students' beliefs of the rate of cheating amongst their peers and the actual reported rates of cheating. To do this, the mean percentage of each estimated cheating behavior was calculated along with the a 95% confidence interval using Vassarstats (Lowry, 2009). A 95% confidence interval is the estimated range of values in which the true score falls with 95% probability (Hays, 1994). If the 95% confidence interval for the estimated cheating behavior

# Table 1

# Actual Cheating Behaviors and Confidence Intervals for Estimated Cheating Behavior

	Actual	Estimated CI		
Cheating Behavior	Percentage	Low	High	Significant
Give another student an answer during exam	52%	35%	42%	U
Place script so others can read your answer	49%	31%	38%	U
Copy Continuous Assessment	35%	44%	50%	Ο
Ask another for an answer in exam	31%	31%	38%	
Read answers on another's script	19%	28%	34%	Ο
Trade scripts so they write your answer	11%	18%	25%	Ο
Obtain exam questions before the exam	5%	13%	19%	Ο
Bring a sheet with notes into the exam hall	3%	20%	25%	Ο
Write answers on a script before the exam	3%	16%	21%	Ο
Arrive early to write answers on exam hall table	2%	13%	17%	Ο
Ask another to impersonate you for an exam	2%	17%	22%	0
Use a handset to store answers	2%	14%	26%	Ο
Pay the lecturer for the exam questions	1%	15%	21%	Ο
Pay the lecturer to give a higher grade	1%	21%	28%	Ο
Bring class notes or textbook into the exam hall	1%	19%	25%	0
Use a handset to receive texts with answers	1%	13%	18%	0
Use handset to send texts with answers	1%	13%	19%	0
Write notes on body parts or clothing	0%	16%	21%	Ο
Admitted to any form of cheating	69%			

*Note.* CI = Confidence Interval. U = Significantly underestimated actual cheating practices.

O = Significantly overestimated actual cheating practices.

contains the actual percentage of students reported engaging in the cheating behavior, then it can be concluded that students had an accurate estimate of the amount of cheating behaviors that their colleagues engage in. However, if the percentage of students who reported engaging in the cheating behavior falls *outside* of the confidence interval, then there is a significant difference between students' beliefs and the actual cheating practices with a 5% probability of a Type I error (conceptually equivalent to  $\alpha = .05$ ).

The second and third columns in Table 1 gives the confidence intervals for students' estimated rates of each malpractice. By comparing the estimated confidence intervals to the actual percentage in the first column, Table 1 shows that students significantly overestimated the amount of cheating that occurs in their classes for all but three types of cheating behavior. Students were accurate in their estimates of how many of their peers ask another student for an answer in the exam. Students significantly underestimated the rate at which their colleagues give other students answers during the exam and students who place their exam scripts so others can read their answers. However, students significantly overestimated the rates of cheating for the other 15 cheating behaviors, sometimes by over 20%.

The second research hypothesis predicted that there is no significant relationship between students' beliefs of peer cheating and their personal cheating behavior. To do this, the estimated percentages for each of the 18 cheating behaviors were averaged for each participant to give an individual total beliefs score. Then number of cheating behaviors that each participant reported engaging in was calculated to give a total actual cheating behavior score for each participant. These two values were then correlated using Pearson's Product Moment Correlation. The correlation between students' estimates of cheating and actual cheating behavior was significant, r (179) = .382, p < .0001 (see Table 2). Consequently, students who *believed* that a higher percentage of their peers were engaged in malpractices *actually participated in more cheating behavior themselves*.

#### Table 2

Correlation between Estimates of Cheating

and Actual Cheating Behavior

R	Df	р	Decision
.382	179	<.0001	Reject

# DISCUSSION

Overall, 69% of the university students in this study admitted to participating in academic malpractices within the past three years of their education. While this is a high percentage of university students, this is comparable to the cheating rates observed in developed countries around the world. In the United States, 76% of university students admitted to cheating on an assignment or exam in either secondary school or university (Davis, Grover, Becker, & McGregor, 1992). In Japan, 55% of the university students reported cheating on an exam (Diekhoff, LaBeff, Shinohara, & Yasukawa, 1999). Even though Nigerian educationalists need to continue to work to decrease the rate of malpractices in schools, they should be encouraged that malpractices are not a problem unique to Nigeria.

The most frequent types of malpractices that students reported engaging in consisted of sharing answers with others during an exam and copying continuous assessments. These are more spontaneous behaviors that occur at chance moments during the examination. The more sophisticated and premeditated types of malpractices, such as paying lecturers and impersonation, were reported by less than 5% of the participants. Thus, the types of malpractices that students reported engaging in most frequently can be easily prevented by enforcing stricter invigilation policies during examinations.

The major finding of this study was that participants significantly overestimate the amount of cheating that occurs. Furthermore, a significant correlation was found between

believed rates of cheating and actual cheating behaviors. Students who believe that many of their peers cheat engage in more cheating behaviors themselves. Therefore, educationalists need to be aware that the frequent talk about exam malpractices may inadvertently increase the amount of cheating that actually occurs. Instead of lamenting about the increasing problem of academic malpractices at schools, conferences, and in the media, educationalists should instead be educating teachers and parents about strategies to prevent cheating. *Recommendations* 

Teachers have the primary responsibility of shaping students' behavior in schools. Therefore, teachers need to take the leading role in combating the war against academic malpractices by implementing policies to prevent cheating within their own classrooms. Indeed, the issue of academic malpractices in Nigeria is complex and will require involvement by parents, students, and society at large. However, since teachers are chiefly responsible for effecting high quality education, they should be the ones who initiate strategies for decreasing the rate of academic malpractices.

In light of the types of cheating behaviors that students reported engaging in, teachers can take a number of positive steps to prevent future academic malpractices. First, teachers should clearly communicate their expectations about malpractices to their students (University of Illinois Center for Teaching Excellence, 2010). Students need to be educated about what behaviors constitute cheating, why these behaviors are wrong, and encourage students to work hard and be honest in their studies. Without a clear understanding of what constitutes malpractices, many honest students may be tempted by the peer pressure of their colleagues simply because they do not understand which behaviors are inappropriate.

Teachers also need to demonstrate their commitment to preventing academic malpractices. Teachers should develop an Academic Honesty Pledge, a contract that outlines the teacher's expectations for honest academic practices (University of California, San Diego, 2006). Students should be required to read, understand, and sign the Academic Honesty Pledge at the beginning of a term. By signing a pledge, the students will have a clear understanding of malpractices and will understand that the teacher has high expectations for honesty. Furthermore, the teacher can refer back to the Academic Honesty Pledge throughout the term, particularly just before exams, to remind students of their commitment to be honest.

Invigilators should increase their vigilance when students are taking exams. Teachers expect their students to study hard for their exams, so teachers have the responsibility to be vigilant through the few hours in which students are taking their exams. When teachers are negligent during the exams, then they communicate to the students that malpractices are acceptable (McKeachie & Svinicki, 2006). Indeed, the most frequently reported types of academic malpractices in this study can easily be prevented by increased vigilance during the exams.

To further discourage these types of malpractices, teachers can create exams where the questions or responses are alternated so students who do get answers from their neighbor will miss the questions because they receive the answer for a different question. Before the exam, teachers should structure the classroom in such a fashion that students are not tempted to share answers with each other, such as sitting students in every other seat. During the exam, teachers should actively move around the room so students know that they are being observed. Teachers should make eye contact with students whose eyes are wandering during the exam and move students who appear to be sharing answers with their neighbors to a different seating location. Under no circumstances should an invigilator leave the classroom when students are taking an exam.

# Conclusion

Academic malpractices present a serious threat to education in Nigeria. However, the situation is not as dire as some make it out to be. Nigerian educationalists understand the

problem that malpractices present. Instead of continuing to lament the problem of academic malpractices, teachers and researchers now need to refocus their energies to developing and empirically testing positive, practical steps that teachers and administrators can take to reduce the rate of academic malpractice and thereby increase the morality and quality of Nigerian society.

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