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STAKEHOLDERS' PERCEPTION OF TEST SECURITY AS MANAGEMENT TOOL FOR CURBING MALPRACTICES IN THE NIGERIAN PUBLIC EXAMINING SYSTEM

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Abstract

The paper examined how test security measures can be integrated in the public examining system to curb the menace of examination malpractices that has become a regular feature of the Nigerian public examining system. In a survey type of research, questionnaire was administered on some stakeholders made up of officials and ad hoc staff of examining bodies, parents and examinees. The data was analysed using percentages and Chi-square statistics. Findings include: stakeholders who are causes of the various forms of malpractice have to be sensitized on the need to fight the menace, test security intelligent group should be formed to nip the menace and tri-dimensional security approach (proactive which considers security issues as part of the whole system from commencement of test development, concurrent security which is made part of the administration of the examining instrument and retrospective measure to evaluate the entire process for improvement) be integrated in the Nigerian public examining system. This would call for increase funding. Thus, it was recommended that all stakeholders should contribute more to the funding of public examining in the country and be concerned with the security of the testing system.

Introduction

Test is important in the educational process. It is the major means by which the level of attainment or accomplishment of educational outcomes (whether cognitive or psychomotor) is determined. Thus, test can be theoretical or practical or both. Test can further be seen as a regulated procedure to sample behaviour as well as to describe the behaviour in terms of scores or categories. Generally, tests in public domain have norms or standards by which the test results can be used

to measure one or more important behaviours. Test is used to determine achievement and also to predict ability and other types of behaviour of a person. If the purpose of a test must be realized, the test must be protected from fraud /leakages.

A test is primarily made up of test items usually drawn from a pool of items, especially with respect to public examining. A test normally undergoes a multi-stage process. Each stage must be well protected from any form of fraud or theft from the outset. This multi-stage process includes the pooling of items, to trial/pilot testing the pool of items with a view to drawing the items with moderate discriminating power and difficulty level and the determination of the reliability and validity coefficients or indices. The validated test items are then standardized to determine the degree of its generalisability ('psychometric properties of the test'). The purpose of this multistage process is to ultimately administer a standardized test on the testees in such a way that the results will give a very fair assessment of the intelligence level of each testee in relation to his peers on the test or behavoiur in case of an achievement or aptitude test. The entire process could be regarded as testing and it includes design or construction of test which is a part of the stages described above. Standardized test is then administered on the testees, scored, graded and results collected as well as disseminated for several purposes, namely: feedback, certification, admission to higher institutions and employment, among others.

Over time, it has been found that examination malpractices are traceable to every stage of the testing process: pool of items, the test itself, and the conduct and management of examinations, scoring, grading and dissemination of the examination results (Uwadiae, 2003). The fact that there is no test until the last stage of the entire process has been concluded should inform the reason to ensure security of the test. However, since malpractice is not restricted to only one but occurs at every stage whether noticed or not, it thus behoves every examining body to ensure that security measures are put in place at every stage but in varying degrees as malpractices are not in the same quantum in every stage of the testing process.

The Longman Dictionary of Contemporary English (2005) defines test in relation to examination as "a set of questions, exercises, or practical activities to measure someone's skill, ability or knowledge".

Oxford Advanced Learner's Dictionary (1997) views test as "a short examination of knowledge or ability, consisting of questions that must be answered or activities that must be carried out". The former definition fits in more into our context than the latter. Thus, test can be seen as the means by which examination is carried out.

In South Africa, testing is seen as "an emperor" because the test conducted by the Independent Examination Board (IEB) of South Africa is known as the National Qualifications Framework holding the ace to the future of so many citizens of that African country (Oberlozer, 2005). The same scenario can be repeated for Nigeria (Uwadiae, 2003). Frempong (2005) stresses that importance of public examining in the life of a nation like Ghana cannot be over-emphasized, because of the role played by public examining in that country and in the future of its citizenry.

However, many scholars also agree that because of the importance of public examining in the life of a nation and its citizens, stakeholders including parents, teachers, school managers and officials of examining bodies of some of the African countries have become threat to the security of the testing system, hence mass examination malpractices often occur (Uwadiae, 2003; Onuka and Obialo, 2004; Onyechere, 2004; Onuka and Amoo, 2004). In an attempt to curb the menace of examination malpractices, the Nigerian Government enacted a law: Act 33 of 1999; but it is yet to be seen if it is effective in curbing or even reducing the incidence of the vice in the body polity of Nigeria. Doubts are being expressed about the effectiveness of the Act to curb the cankerworm, as examination malpractices continue unabated (Onuka and Amoo, 2004). The Act nevertheless outlines among others the following as elements of examination malpractices:

✓ Cheating at examinations;
✓ Stealing of question papers;
✓ Impersonating;
✓ Disorderliness at examinations;
✓ Disturbance at examinations;
✓ Misconduct at examinations;
✓ Obstruction of a supervisor in the course of discharging his/her duties during examinations;
✓ Conspiracy to cheat;
✓ Breach of duties during examinations;

✓ Aiding and abetting during examinations; and
✓ Other related offices.

Reviewing this act, it could be inferred that it concentrates mostly on malpractices during the conduct of examinations. It does not take cognizance of malpractices before or after the conduct of examinations nor of threats to test security before, during and after the conduct of examinations. There is, therefore, the need to ensure the security of the test at all points. This is because as Oyediran (2007: 1) states:

The integrity of an examination paper lies in the ability of the examiner (in our case, a public examining body) to secure the test from cradle to the administration of the test and beyond. This will forestall the potential compromises before, during and after the examination had taken place.

The Longman Dictionary describes security as "protection from danger". It further perceives security as "anything done to keep a person, building or country safe from danger" or protection from bad things that could happen to person or a thing. Thus, test security consists of all efforts geared towards keeping the test from the danger of being bastardized by way of malpractices, from its conception to the time of releasing the results or until its purpose is consummated. Invariably, therefore, it is important that an examining body ensures that test security starts with the collection of the pools of items, until the provision of results to the relevant stakeholders. Test could be described as a standardized and perhaps systematic procedure for sampling behaviour and to describe it with categories or scores. Furthermore, some tests have norms or standards by which results can be used to predict other more important behaviours. Test is a potent component of the education process, as important educational outcomes are determined through test in the main. Test can either be theoretical or practical and sometimes both as in physics, chemistry or vocational courses. Viewed from some other perspective, test can be seen as a tool that can be used to determine the level of acquisition of knowledge and skills by learners or participants in a course of study, hence there is the necessity to secure it at all times.

The multistage testing process nature which includes: planning, design/construction, administration, scoring, grading and reporting or dissemination of its result portends the necessity for security mechanism to be in place and effectively used to manage examination

malpractices (Onuka, 2008). Thus, each of these stages needs to be protected from theft or fraud which can be caused by an official – ad hoc or permanent or by some other person. Hence, there is the need to secure the test from any form of malpractices from the outset of the test (planning/design) to the end of the test when its results are communicated to the relevant stakeholders).

The importance of test in human capital development cannot be over-stressed. This is so because of the fact that the theory and the practice of education, training and development have shown that the most potent way of determining how much learning had taken place is through test. Hence, there arises the need to ensure its integrity and quality by assuring its security at all stages of development and execution. For instance, test can be used to verify how much skill an apprentice mechanic has acquired to qualify him to practise as mechanic or how much knowledge and skills a medical doctor has acquired to enables him to practise as a physician such that he does not send people to untimely death. A test is utilized to verify the psychological state of a person or the personality or character traits of a personality and thus, determine his suitability for a particular position. This helps to ensure that a person who possesses the right spirit and self-control is put in a position of responsibility, where he will exercise control over people. Test equally determines who to be placed in a certain institution/organization in the face of high rate of competition for either job or admission into an educational institution. All these uses of test had defined the high level of importance attached to testing.

The some stages as stated in the training manuals produced by the Institute of Education, University of Ibadan, Nigeria (2005 and 2006) are: pool of test items, test items construction/design, assessment of test items, creating data base for the items, test production, (all of which fall within the realm of pre-examination activities). Test administration activities include securing examination venues, arranging them for the conduct of the examination, conducting the examination, supervision, accreditation of the centres, monitoring and evaluation of the examination activities, and process assessment in the practical examinations. While post-examination activities have on their list among others: marking and scoring, treatment and of course the dissemination of the examination results.

The process of public examining includes planning, placing advertisements for prospective candidates (school or private) whereby the conditions of registration for to examinations are spelt out including how to register, the fees, where and how to obtain the forms, how the process; return them, deadline for submission of forms, late registration and the extra cost involved and recruitment and management of ad hoc staff as well as manage the entire examining process etc., the official processing of the forms including acknowledgement of the receipt of the forms, dissemination of information about the conduct of the examinations to the candidates, examination centres, examination number of candidates as applicable where they are not already known, and examination timetable. it also includes the arrangement for oral and practical examinations. There is the production and distribution of mark sheet or mark/attendance sheets, their allocation of the sheets, data processing, examination instructions being clearly spelt out at every stage of the testing process so as to properly and unambiguously guide everyone concerned in the examining process, production/publication of question papers, making schemes, the distribution done proportionately equitably, etc. Security precautions must be taken at every stage of the process as shall be elucidated later in this module. There is also the appointment of examiners and supervisors, co-ordinations for item writing, moderation and marking, subject award meetings, dissemination of results and the issue of certificates. The processes for these should be clearly and unambiguously stated and religiously followed to ensure the examinations possess the pre-requisite integrity and recognition.

Lending credence to the fact that examination malpractices permeate every facet of the examination process, Ojerinde (2005) infers that malpractices take place at every stage of the examinations, namely: pre-examination, during examination and post-examination. Hence, the need to protect the integrity and credibility of our testing system as a nation and region (African Region), so that holders of certificates resulting from the African testing bodies can compete with their peers from any part of the globe and to eliminate the disdain with which our examinations are held. This untoward trend in the examination system calls for test security mechanism evolution to check as well as ultimately eliminate the cankerworm of examination fraud from the public examining system of the African continent. Test

security is a measure of safety of a test at every stage of the test as may be thought necessary, by scrutinizing the officials and ad hoc staff of an examining body. This is done during the period of staff recruitment with the assistance of the intelligence corps of the examining body and/or in cooperation with the national security or intelligence agency, to ensure that only those with high degree of integrity are employed.

Intelligence surveillance should be inbuilt in every unit of the examining body so that every test stage is secured, and thus avoid or minimize the embarrassing situation of being exposed to scandal, fraud or malpractices that have become the bane of both public and private or school examining on the continent of Africa. Oyediran (2007) observes that security consciousness of items is the one rule in test construction or design that must be taken very seriously. Thus, a commissioned item writer is not to be known to anyone else but only the one commissioning him. To ensure test reliability and validity, security at every stage of development and administration as well as beyond becomes a necessity.

Studies and evidence about examination fraud, malpractices or threats to test security abound (Ojerinde, 2005; Onuka and Obialo, 2004; Onuka and Amoo, 2004). According to these scholars, examination malpractices which take various forms had continued to be on the increase in spite of the efforts to curb the menace. Test security is the vehicle that can be used to both restore and sustain public confidence in public testing. The major import of these revelations is the fact that the African examining system is fraught with the danger of test insecurity that must be squarely addressed (Onuka, 2008). Onuka (2008) identifies the following types of test security measure: Proactive (preventive) test security – which spans test development through production stages; this can otherwise be taken as diagnostic test security measure; Concurrent (defensive) security – which is undertaken during test administration and the marking exercise. This can be viewed as developmental security measure; Retroactive (restorative) test security which is investigative or done retrospective to find out any anomaly after the examination in order to forestall a future repeat of such anomalies. This can be regarded as summative test security. It can also be seen as prognostic evaluation.

According to Abolurin (2007), security has more than one dimension. These are largely foresight, prevention, emergency and

restoration. Foresight as dimension of security deals with acquisition of data in order to understand the risks and variables within any defined area and in the context of this discourse, with particular reference to test, to each of the stages of the testing process enumerated earlier. Each stage would require that stage-specific kind of test security be adopted. The next dimension of security provision is the prevention which is obtained by way of having adequately coordinated policy regarding the entire testing process management, the human resource or capital and the available tools. Here, the security mechanism is planned in such a way that even staff recruitment takes security into consideration so that the wrong and dubious person is not recruited and if inadvertently employed he is shown the way out with immediate effect. It must be noted that human capital is charged with the responsibilities of testing from its conception to its administration and dissemination of its results. Thus, they must be made from the outset of their engagement to be security conscious in whatever capacity they found themselves. They should also be security active by being honest in the discharge of their duties.

Another dimension in security provision is emergency security measure that comes by way of opportunity or chance, because it was not originally envisaged, so it is usually intended, in the first instance, to control the emergency and find permanent security measure. It, however, portends that security measure that ensures rapid response to such unanticipated security problem is in place at all times. There must be readiness by those charged with responsibilities of securing the integrity of the test to avert any emerging security issues with the required level of speed (with dispatch).

Restoration is the next dimension in security provision. This dimension ensures security mechanism that helps to restore normalcy and in our context credibility and integrity to the system in the shortest possible time is in place. Restoration security is a follow-up security dimension that is put in place to restore normalcy to a damaged testing situation. Thus, even in the circumstance of emergence of malpractice, a security mechanism is empanelled to deal with such in the regime of rapid response, especially if a new test was to be administered, so that it will be secure and thus have integrity restored to it.

Proactive (preventive) test security- (test development through production): This is the security measures that are put in place at outset

of the preparatory period up to the point just before the conduct of the examinations. This is done to ensure that the test is secure all through the pre-examination period. All stakeholders must be involved in test security but in varying degrees and manner and at the relevant stage in order to avert insecurity of the test we set out to protect.

In the light of the above, this study was designed to find out how test security is undertaken, whether it is adequate and the perceived relationship between security of public examining bodies and reduction in incidence examination fraud in Nigeria.

Research Questions

The following questions were then posed in order to proffer answers to the identified problem of security in public examining in Nigeria:
1. Are the test security measures currently undertaken by public examining bodies adequate?
2. How can these measures be improved upon to protect the integrity of the Nigerian public examining system?
3. What are the challenges of public examining in Nigeria?
4. What is the difference between the expected effect of reducing examination practices (fraud) in Nigeria and actual effect using the current level of test security measures?

Methodology

The study was a survey research which employed the ex-post facto method as no variable in the study was manipulated by the researcher. The sample consists of 200 examiners (140 ad hoc and 60 permanent staff) during the conduct nation-wide public examinations in Nigeria in 2008 by the West African Examinations Council (WAEC) and the subsequent marking exercise in the same year. 40 parents and 200 students who have previously taken part in the examinations were also used as samples, using convenient sampling method as it was difficult to determine the entire population and track down people during the examinations. However, the parents and students did participate only in providing response to items dealing with questions 3 and 4; in parts 3 and 4 of the instrument respectively, because of their limited knowledge about what happens during the preparation stage. In other words, the latter groups of subjects responded to items on security during conduct of examinations and the subsequent marking exercises.

All the subjects were selected from Oyo State, Nigeria. Only seasoned and experienced ad hoc officials with at least ten years experience were used. A 70 item questionnaire consisting of four parts addressing the questions of the study developed and validated by the researcher yielding Cronbach alpha reliability co-efficient of 0.78 and 0.71 validity using factor analysis was used to collect data. The instrument was administered personally by researcher and his research student on the subjects during a four week long examining period. Data from the study were analysed using percentages and Chi-square statistics.

Results and Discussion:

Table 1

Adequacy of test security measures currently undertaken by Nigerian public examining system as perceived by 200 examining officials (ad hoc and permanent)

Test Security Measures	Permanent staff (%)		Ad hoc staff (%)	
	Agree	Disagree	Agree	Disagree
Intelligence Surveillance in recruit of members of staff	19.5	10.5	45,5	24,4
Intelligence Surveillance in recruit of ad hoc staff	21.0	9.0	49.0	21.0
Intelligence Surveillance in the use of custodians	12.3	17.7	28.7	41.3
Intelligence Surveillance in recruit of supervisors	16.5	13.5	38.5	31.5
Intelligence Surveillance in designating exam centres	21.6	8.4	50.4	19.6
Intelligence Surveillance in recruitment of assistant examiners for the marking exercise	19.2	10.8	44.8	25.2
Intelligence Surveillance in recruitment of test item writers	17.4	12.6	40.6	29.4
Intelligence Surveillance in ensuring absolute loyalty of staff to council	20.4	9.6	47.6	22.4

integrity				
Intelligence Surveillance in ensuring absolute loyalty of ad hoc staff to council integrity	15.6	14.4	36.4	33.6
Intelligence Surveillance in ensuring absolute security preparation of examination papers	22.5	7.5	52.5	17.5
Intelligence Surveillance in ensuring absolute security in the choice the printers	18.0	12.0	42.0	28.0
Intelligence Surveillance in ensuring absolute security of the printing process	24.0	6.0	56.0	14.0
Intelligence Surveillance in ensuring absolute in conveying the printed papers	24.0	6,0	56.0	14.0
Intelligence Surveillance in ensuring absolute security in storage of the papers for storage	25.5	4.5	59.5	10.5
Intelligence Surveillance in ensuring absolute security in distribution to centres	28.5	1.5	66.5	3.5
Intelligence Surveillance in ensuring absolute security in conveying the papers back to the custodians	20.4	9.6	40.6	29.4
Intelligence Surveillance in ensuring absolute security in monitoring movement of papers from custodians to centres	24.3	5.7	56.7	13.3
Intelligence Surveillance in ensuring absolute security in the return of papers from centres back to custodians	28.5	1.5	66.5	3.5
Intelligence Surveillance	14.4	15.6	33.6	36.4

in ensuring absolute security in monitoring the conduct of the examinations				
Intelligence Surveillance in ensuring that supervisors are performing their duties effectively	17.1	12.9	39.9	30.1
Intelligence Surveillance in ensuring absolute security in collation of written examination papers	21.3	8.7	49.7	20.3
Intelligence Surveillance in ensuring absolute security in the papers are discretely distributed for marking	26.4	3.6	61.6	8.4
Intelligence Surveillance in ensuring absolute security in marking coordination	29.4	0.6	68.6	1.4
Intelligence Surveillance in ensuring absolute security in conference marking of the papers	26.7	3.3	62.3	7.7
Intelligence Surveillance in ensuring that the team leaders do the right thing	26.7	3.3	62.3	7.7
Intelligence Surveillance in ensuring assistant examiners mark the papers and submit promptly	24.3	5.7	56.7	13.3
Intelligence Surveillance in ensuring absolute security officials monitoring the conduct of examinations do their own bit diligently	20.7	9.3	48.3	21.7
Intelligence Surveillance in ensuring the officials monitoring the marking process do so well	30.0	0.0	70.0	0.0
Intelligence Surveillance	26.1	3.9	60.9	9.1

in ensuring absolute security in collating and disseminating the results				

Table 1 shows the types of test security measures, the stakeholders perceived are currently in place in public examining and the degree to which they believe each index is adequate. These measures according to them are: examination bodies' monitoring of the marking of the scripts as being rated as 100% or absolutely perfect, possibly because it is done in conference and there are a number of strata of hierarchy overseeing the process. This was closely followed by security measures at the marking co-ordination, probably because the two are closely related and follow the other while the number of participants would have reduced in the former, hence the 2% difference of adequacy in their perceptions by stakeholders. However, bringing the up the rear in terms of perceived adequacy of security measure taken is the choice and use of custodians with only 41% believing that it is enough, a pivotal factor in examination security issues. This may perhaps be responsible for some of the lapses that create opportunities for examination leakages and other forms of malpractices during the conduct of examinations. The monitoring during the conduct was also perceived to be low at just 48% level of adequacy. It is thought that such security neglect during examinations is partly responsible for the rowdy and sometimes threatening/alarming situation that is often witnessed in some examination centres. These findings corroborate the assertion of Onuka (2008) that unless some drastic security measures are taken before, during and after the conduct of public examinations there will continue to be examination malpractices in an alarming dimension yet to be witnessed. They also confirm the inference made by Ojerinde (2005) that examination malpractices occur at any stage of the testing process, for which reason, Onuka (2008) proposed there should be three dimension of test security: Proactive (pre-examination conduct), concurrent (during the conduct of examinations) and restoractive (retrospective or post-examination). On the whole, stakeholders believe that there are a lot of security measures already in place as depicted the table. What is perhaps needed is applying them wholesomely to ensure they work to restore integrity to public examining system of Nigeria and indeed all of Africa. The implication of these findings is that most of the essential ingredient necessary for test

security mechanism is two-fold, namely: though they are in place but are not being enforced or there are internal and external forces working together to sabotage the working of the test security mechanism and they, therefore, need to be overhauled. All other indices of test security were rated above average; an indication that much is still needed to be done to ensure absolute security of the examining sub-sector.The net result is that examinations void of malpractices will be effectively managed.

Table 2

Security measures necessary to improve the integrity of the Nigerian public examining system from the perspective of 60 permanent and 140 ad hoc examining officials

Item/indicator of test security measures	Permanent staff (%)		Ad hoc staff (%)	
	Agree	Disagree	Agree	Disagree
Set up special Intelligence unit	23.4	6.6	54.6	15.4
Give special incentive to those in the intelligence unit	19.8	10.2	46.2	23.8
Move the intelligence personnel randomly around	20.7	9.3	48.3	21.7
Move staff around to ensure none becomes an institution in the council	12	18	28	42
Apply sanction promptly whenever required	28.2	1.8	65.8	4.2
Randomly assign staff to examination duties	21.9	8.1	51-1	18.9
Do random assignment of examination matters	22.5	7.5	52.5	17.5
At any particular time an official should be held responsible for any misnomer	11.1	18.9	25.9	44.1
Item writers should be randomly selected	18.6	11.4	43.4	26.6
Supervisors should be selected with the involvement of intelligence personnel	27.9	5.1	65.1	11.9
Very senior personnel should be involved in printing and security arrangement & are to be held responsible if anything goes wrong	27.3	2.7	63.7	6.3

There should be security arrangement at every stage of the test process	30.0	0.0	70.0	0.0
There should be no permanent exam security personnel, but random rotation among staff	29.1	0.9	67.9	2.1
All ad hoc must be thoroughly scrutinised by intelligence personnel before being recruited	17.7	12.3	41.3	28.7
Test security should be well-funded	30.0	0.0	70.0	0.0

In Table 2, respondents feel there still are some more test security measures to be taken in order to ensure high level of integrity of our public examining system. These measures include establishment of examinations intelligence corps in every public examining body, such personnel could then be reshuffled randomly. There should be proper security arrangement at every stage of the examining (this was the view of all respondents), which view may not be unconnected with the fact there had been several threats to the lives of diligent examining body officials (permanent or ad hoc), as one was reportedly killed in Ghana in 2006. This trend confirms the finding of Conteh (2008) that there were threats to lives of examining officials because of desperation by some indolent candidates, sometimes with collaboration of parents and security personnel, to pass examinations they were never really prepared for by all means. However, majority of the officials (permanent and ad hoc) disagreed that senior officials should be held responsible for any security lapses and that staff be randomly moved around various examination duties so that they do not become institution. Majority, nevertheless, agree that test security personnel be moved around the various beats in the examining bodies and that there should be no permanent test security personnel within, since any official could be moved to such beat and be moved elsewhere. This confirms the assertion of Onuka (2008) in a paper he presented on test security at a training workshop organised for examining bodies by IAEA and the Institute of Education, University of Ibadan, Nigeria, that to make intelligence surveillance efficient staff be randomly moved around various beats, however, those with doubtful integrity should never be taken to such a sensitive position in an examining institution.

As high as 94% believe that one of the things that can serve as deterrent to examination insecurity is full application of appropriate sanctions, which according to Onuka and Amusan (2008) would tremendously reduce the incidence of examination fraud. All the points made here in connection with the measures to overhaul test security mechanism in public examining system agree with the implication of the findings in table 1 that although there are enough measures to ensure the security of the testing programme of the Nigerian public examining system, yet there is need for total overhauling to make it more effective in checking the menace of examination malpractices thereby restoring integrity to our public examining system. Moreso, most respondents in the study feel there should be improvement in the security measures of the public examining sub-sector of our education system.

Table 3

The challenges of test security in public examining in Nigeria (440 subjects- parents, officials and students)

Indicators of test security	Permanent staff (%)		Ad hoc staff (%)		Parents (%)		Students (%)	
	Agree	Disagree	Agree	Disagree	Agree	Disagree	Agree	Disagree
Political interference	13.7	0.28	31.4	0.64	8.8	0.18	44.1	0.9
Threat to the life of exam personnel	10.1	5.3	23.0	12.2	6.5	3.4	32.4	17.1
Insufficient funding or lack of fund	11.3	2.7	25.9	6.1	7.3	1.7	36.5	8.6
Lack of political will to ensure test security	11.5	2.5	26.2	5.8	7.4	1.6	36.9	8.1
Lack of co-operation by various stakeholders	11.9	2.1	27.2	4.8	7.7	1.3	38.3	6.7
Sabotage by some stakeholders	2.9	11.1	6.7	25.3	1.9	7.1	9.5	35.5
Exam mercenary syndrome	3.5	10.5	8.0	24.0	2.3	6.7	11.3	33.7
Desperation on the part of some indolent students	9.1	4.9	20.8	11.2	5.9	3.1	29.3	15.7
Desperate school	6.3	7.7	14.4	17.6	4.1	4.9	20.3	24.7

principals and teachers								
Non-challant attitude of some security personnel	9.9	4.1	22.7	9.3	6.4	2.6	31.9	13.1
Investigating methods sometimes adopted by security agencies	11.5	2.5	26.2	5.8	7.4	1.6	36.9	8.1
Non-application of appropriate sanctions	10.5	3.5	24.0	8.0	6.8	2.2	33.8	11.2
Slow judicial system and judicial manipulation/corr uption	7.7	6.3	17.6	14.4	4.9	4.1	24.8	20.2
Lack of interest in test security by stakeholders	7.3	6.7	16.6	15.4	4.7	4.3	23.4	21.6

Concerning the challenges to the realization of the purpose of test security in our public examining system, of the fourteen indices used in the study, all but three were seen as highly posing challenges to test security. The percentages of subjects seeing them as challenges range from 52% to 98%, while the three other indices (sabotage by the various stakeholders, examination mercenary syndrome and desperation by school principals and teachers) were seen by 21%, 25% and 45% respectively as posing challenges, which implies that majority of subjects possibly because as parts of the people involved in those index categories are uncomfortable with accepting the fact that they constitute challenges in order to avoid self indictment. These findings corroborate the view of Uwadiae (2003) that stakeholders are the major constraint to effectively checking the menace of increasing rate of examination malpractices, while also confirming the fact that all stakeholders must rise up to promote academic integrity in our body polity (Onuka and Raji, 2005). By implication, therefore, the matter of test security in public examining should not be seen and left to the examining bodies alone, but must be seen and taken up as the duty of every citizen.

Table 4

Difference between expected and actual effects of the current level of test security in reducing incidence of examination fraud (440 parents, officials and students)

Category of Respondents	X^2 obs	X^2 Crtit	Level of significance	Crammer's V
Staff	136.02	60.7	0.01	0.57
Ad hoc	336.51	89.04	0.01	0.53
Parents	78.56	57.1	0.01	0.50
Students	245.7	105.01	0.01	0.48

Table 4 presents the perception of stakeholders on the difference between the effect of the current level of test security measures in curbing examination fraud and the expectation of the people. All categories of respondent perceived that there was significant difference between expected and actual effects of the current level of test security in curbing the menace of examination fraud. These findings show that the various stakeholders agreed that improved security should be evolved in our public examining system. These differences as shown by the Crammer's V statistic are 0.57, 0.53, 0.50 and 0.48 by staff, ad hoc staff, parents and students respectively. These show that the stakeholders variously think that the differences are 57%, 53%, 50% and 48% respectively as shown in the table. The differences in perception can be attributed to the fact that the stakeholders have differential rate of involvement in the examining process, hence the depth of the knowledge they possessed about the goings-on in the system. Thus their perception is based on what they see and understand about the operations of the elements of the mechanism. The officials see it better; hence 57% of the officials think that the measures are not as effective as they expected it to be, while bringing up the rear is the students who possess less knowledge about the operation of the test security. The findings confirm the assertion of Onuka (2008) and Onuka and Amoo (2004) that an all-round test security mechanism be evolved to ensure that every stage of the testing system is properly secured and integrity restored to the public examining system in Nigeria and indeed all of Africa. The implication of the findings is the need for improved test security measures in the public examining system.

Conclusion

The need for test security from the cradle of the testing process to its ultimate cannot be over-stressed if integrity were to be restored to our public examining and the entire education system. In fact, the need to put a three-dimension test security in place was seen as a necessity for assurance of the security of the public examining system as well as a means to restore the people's confidence in public examining system and the resulting certification and thus ensure that examinations devoid of malpractices are planned and managed.

Recommendations

Based on the finding and conclusion above, the following recommendations were made:

- Examining bodies should set-up test security intelligence corps within the system to keep surveillance on every process of the testing system.
- Recruitment of examination staff (permanent and ad hoc) should have security component. They should be properly scrutinised to ensure that only those with high degree of integrity, which is required of such calibre of people, are employed into the system.
- All stakeholders must be concerned about test security and become part of ensuring that the testing system possesses high level integrity, working in concert with the examining bodies.
- Test security programme of the public examining system should be adequately funded for effectiveness.
- All test security issues must be taken seriously and all necessary sanctions should be appropriately applied irrespective of whose ox is gored. In other words, the political will to apply sanctions as find appropriate must be developed and maintained.
- Test security issues must be subject to political exigencies and/or vagaries. A great measure of stability and continuity must be evolved and maintained with regard to test security matters.
- Examination tribunals should be set-up by governments to deal with any detected threat to test security before, during and after the conduct of any examinations.

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