

# Effects of Emotional Intelligence and Peer Acceptance on Test-wiseness among Undergraduate in Southwest Universities

ASIYANBI MUTIAT<sup>1</sup> and YUSUF ADAM O<sup>2</sup>

<sup>1</sup>Department of Psychology, Federal College of Education Special Oyo

Correspondence Email: mutiatasiyanbi@gmail.com

Tel: +234-080-5034-5757

<sup>2</sup>Department of Guidance and Counselling, Faculty of Educationm University of Ibadan

**Abstract:** *Test-wiseness is a variable that has been researched on over time. Despite this, factors that really influence the above variable have not reached agreement among researchers. In order to clarify some of these concerns, this study, which adopted a descriptive survey, was designed to investigate the effects of emotional intelligence and peer acceptance on test-wiseness among undergraduate students in southwest universities. Three hundred participants were chosen from the selected tertiary institutions through stratified random sampling. Their ages ranged between 12 and 24 with mean of 23.14 years (SD= 7.11). Three research questions were tested using multiple regression analysis and Pearson Product Moment Correlation. A structured questionnaire consisting of demographic section, and measures emotional intelligence and peer acceptance was used to collect data. The findings revealed that there was significant positive relationships between emotional intelligence ( $r = 0.510, p < 0.05$ ) followed by peer acceptance ( $r = 0.212, p < 0.05$ ) and test-wiseness. The two variables jointly accounted for 83.1% variance in predicting test-wiseness of the universities students. The independent variables made positive relative contribution to test-wiseness in the following order: emotional intelligence ( $\beta = 0.410, t = 5.537, p < 0.05$ ) followed by peer acceptance ( $\beta = 0.128, t = 2.675; p < 0.05$ ) had relative contribution to test-wiseness of the universities students. Based on this, there is need for personal social, group counselling and individual counselling in tertiary institutions where undergraduate students with challenged homes are counselled. Parents and guardians should bridge up the communication gaps between them and their adolescents.*

**Keywords:** Test-wiseness, Emotional Intelligence and Peer Acceptance.

## INTRODUCTION

It is the wish and aspirations of most parents in Nigeria that their children should attain high academic performance and receive university education. For a student to be admitted into Nigerian universities, he/she must have scaled through all the hurdles of primary and secondary school education. At each stage of education levels, students must participate and pass series of tests. Achievement tests are considered to be the most important measurement tool used by the lecturer in the evaluation of undergraduate student achievement and have a significant role in the life of the undergraduate students, especially in the domain of decision-making at the individual level for the future of students (Odeh, 2018). Test is believed to be one of the psychological instruments used to quantify a specific behaviour or measure students' level of attainment. Dodeen (2019) sees test as the most common evaluating method in most of the educational systems and academic institutions worldwide. Tests can be used in education arena for placement, certification, admission, detection of specific behaviour, selection and decision making (Pour-Mohammadi & Jafre, 2017).

Tests, in this country, are taken as high stakes (that is tests with very important consequences for undergraduate students). In view of the importance accorded to tests, therefore, to the future prospects of undergraduate students, concerted effort should be made by the lecturers for students to do well in their tests. By increasing use of tests at the present time and in all domains, this led to make the scientists of measurement and evaluation interested in determining factors that positively or negatively affect undergraduate students' scores, which effect on measurement tool subjective and validity related to individuals that the test applied to them and the test itself and the conditions of the test which lead to getting variant scores (Odeh, 2018 & Melhem, 2019). Many studies have been conducted in sixties and seventies of the last century, all of which confirmed the presence of other factors which have a prominent role in influencing test scores variation which is the test –wiseness and it is considered an important source of variation in the scores and it is a factor that explains the differences between students that are in the same ability and level, it is independent of individual's knowledge of the subject of the test or the random error, which means that part of the true variance in student's scores are caused by test–wiseness (Millman, Bishop & Ebel, 2016).

This means that test –wiseness is one of the personal factors that affects undergraduate students scores such as anxiety, fear and motivation and self-confidence but it is different from these factors (Morse, 2018). Throughout the year, undergraduate students made great efforts in the institutions to get high marks in the tests but they got grades that do not fit the level of readiness which means that they got marks less than what expected from them compared to their effort, but on the opposite side some undergraduate students prepared weakly and they got higher scores than those who prepared hardly and they are at the same level of ability. Scientists of measurement and evaluation interpreted that "those who have gotten high scores more than others who are of the same level and ability" that they have benefited from the test situation and they knew how to deal with it, because they have high level of test –wiseness (Anderson, 2016, Diamond, 2017 & Odeh, 2018). Even if undergraduate students own effective and appropriate skills for studying and reminding what they studied, they still face some problems when taking the test because the test environment makes pressure and anxiety for undergraduate students (Dodine, 2015).

Test wiseness is defined as a subject's capacity to utilize the characteristics and formats of the test and/or the test-taking situation to receive a high score. It is logically independent of the examinee's knowledge of the subject matter for which the items supposedly measure." Basically then, test wiseness suggests a cognitive ability (or abilities) that one may employ on a variety of tests, regardless of the nature of the tests' subjective content. Millman et al. developed test wiseness taxonomy which has since been adopted as a conceptual framework for the construct of test wiseness. Its development consisted of a synthesis of the literatures of test construction principles, and problem solving styles of examinees. Test wiseness encompasses both the method of measurement (tests testing situation), and characteristics of examinees (states-traits) (Morse, 2018; Odeh, 2018 & Mustapha, 2019).

Testwiseness on the other hand is being defined by Ebel and Frisbie (2015) as that quality possessed by a testee's at a particular period, which enable him/her to do well in a test, irrespective of if he/she knows much about the test or not. Students who are test-wise according to Cohen (2017) know how to manipulate their time, speed, manner of answering questions in the test and they have developed their writing skills for the essay questions. They also understand instructions quickly and as a result of this, they usually score high marks in examinations. It can be inferred from these definitions that test-wiseness is the skill that the testees possess, which is different from skills that the test is intended to measure. Since test-wiseness is independent of testee's knowledge of subject matter, it can be regarded as one of the factors that contribute error variance to observed scores. It therefore implies that unless all students are testwise, differences in test scores caused by levels of testwiseness may affect test reliability. The need to make undergraduate students test-wise by teaching them test-taking skills in the classroom has been stressed (Mustapha, 2019).

This is necessary because students' lack of test-taking skills may contribute to poor performance. It may also make students' scores to fall short of his true scores, which will constitute a threat to validity of the test. Mustapha (2016) was of the opinion that test-taking skills should be taught to all students at all levels of education in Nigeria. He further stressed that such training should focus on all components of test-wiseness such as how to prepare for a test, how to respond to different types of test items, how to avoid errors during tests, how to use idiosyncrasies built into a test by the teacher, how to use time effectively, how to eliminate incorrect alternatives, and how to avoid examination malpractice, who to use similar alternatives, stem cue, guessing strategy, content information, consistency in grammar, response set and abstract foils. Testwiseness (variously called test-taking skills, test expertise or test sophistication) emanates from testees regular taking of examinations and can confer a significant advantage to the experienced testees over those that are not experienced. It was Thorndike (1951) who first brought forth the concept of testwiseness as a variable in test performance. He sees it as a prominent source of score variance on cognitive tests second in influenced only to individual's cognitive ability. Millman, Bishop and Ebel (2016) see testwiseness as the "subjects' ability to utilize the characteristics and formats of the test and/or the test taking situation to receive high score". They are also of the view that testwiseness is logically independent of the examinee's knowledge of the subject-matter for which the items supposedly measures.

Test-wiseness is logically independent of the examinee's knowledge of the subject matter for which items are supposedly measuring. It is restricted to the actual taking of (not preparing for) objective achievement and aptitude tests (Chance, 2017). Their outline of test-wiseness or test-taking principles includes elements independent of the test constructor or of the test purpose such as appropriate time using strategies, careful attention to directions, careful checking of answers, as well as the use of guessing and deductive reasoning strategies. More sophisticated test wiseness principles include those elements which are dependent upon the test constructor or the test purpose. These involve consideration of the intent of the question and the recognition of cue-using strategies which may have been inadvertently adopted by the test constructor. These principles may prove beneficial when the test taker has knowledge of particular test making behaviors or knowledge of particular testing practices gained from past experiences with tests similar in purpose and format. Less sophisticated principles include elements that are independent of the test maker or test purpose. If employed, these strategies will help undergraduate students avoid losing points for reasons other than lack of knowledge of the content tested (Bachman, 2019). Bachman (2019) defines test wiseness as "a set of individual characteristics related to the amount and type of preparation or prior experience with a given test. They include the conscious pacing of one's time, reading questions before the passage upon which they are based and ruling out as many alternatives as possible in multiple choice items and then guessing among the ones remaining." Test wiseness is of importance because it is not equally benefitted by test takers at different ability levels. Students who are test wise can outperform students of equal ability who lack test-wiseness (Cohen, 2017).

Rogers and Bateson (2015) asserts that test-wiseness is, therefore, a source of invalidity since it allows some test takers have an unfair advantage over others. Miller, Fuqua and Fagley (2018) refer to test takers' differences in their employment of test-wiseness as a source of content invalidity. Scruggs and Mastropierri (2015) also states that all test takers do not equally benefit from test taking skills. Language test scores cannot be interpreted as an indicator of the very particular language ability aimed to be measured; the issue, hence, endangers both the validity and reliability of the tests. Test-wiseness is an individual's ability to improve his or her test score by recognizing and utilizing cues in the test multiple choice items, format or testing situation (Houston, 2015). It is, hence, independent of the subject matter for which the items are supposed to measure (Millman, Bishop, Ebel, 2016). While test content has been found not to be a largely determining factor in the use of test-wiseness strategies, test method is known to be largely influential factor (Cohen, 2017).

Dolly and William (2017) maintained that test-wiseness as an individual ability to answer correctly on multi – choice items containing external evidences to get high scores independently from knowledge with content subject (Ebell, 2016), while Millman, et al., (2016) defined it as "the capability of the tested student to benefit from the characteristics and formats of the test in a test situation to get a high score. And it is independent of the examinee's of the knowledge content of the test questions", but Rogers and

Bateson (2015) defined it as "the a set of skills that exist among a group of students and that they use in answering questions that they do not know by using certain skills, such as guessing, to take advantage of test organizer mistakes by creating signs that leads to the correct answer". Allan (2016) stated that the ability to manifest test-taking skills which utilize the characteristics and format of a test and for test taking situation in order to get a score commensurate with the abilities being measured. Testwiseness (TW) emanates from testees regular taking of examinations and can confer a significant advantage to the experienced testees over those that are not experienced (Mustapha, 2017). However, it is that quality possessed by a student at a particular period which enhances his/her performance in a test. Similarly, testwiseness is the ability of a test taker to answer correctly a particular test item or question without having adequate knowledge of the subject matter being tested. Testwiseness has been seen as the various sources of test variance. It was suggested as one of the sources of variance in educational test scores other than item content and random error (Millman, Bishop & Ebel, 2016). Specifically, due to testwiseness, the response set is known to influence the performance of students in objective tests (Ajeigbe & Afolabi, 2018).

One of the variables to be considered on testwiseness among undergraduate in southwest universities is emotional intelligence. Hein (2015), while introducing his definition of emotional intelligence, explains emotional intelligence as an innate ability which can be either developed or damaged by experiences of life. As emotional intelligence is associated with testwiseness of undergraduate students and daily social relations and dealing, it is important for developing a strong personality that various environmental factors that can affect emotional intelligence development should be taken into account. Specifically the transition period of undergraduate students is not only pleasant but is also full of social life. During this transition period, undergraduate students tend to face conflict with their friends, family, make new relations, learn to work independently and adopt new habits according to new environment (Salovey & Mayer, 2017).

Emotional intelligence refers to a better understanding of emotions, an effective management of emotions, understanding of others and improving personal image. Emotions are a useful source of information that helps us handle the social environment. Emotional intelligence includes four types of abilities: perception of emotions, using emotions, understanding emotions and managing emotions (Bar-On, 2015). The current definition of emotional intelligence as defined by Mayer, Salovey and Caruso (2016), includes the capacity to perceive, understand stand and manage emotions". Undergraduate students high in emotional intelligence based on the above definition should have some of the elements required for also being low in testwiseness. Emotional intelligence has been theoretically related to several important human values including life satisfaction and the quality of interpersonal relationships that involve considerable reasoning with emotional information (Bar-On, 2015; Goleman, 2016)

Emotional intelligence is also one of the vital aspect that can influence testwiseness and it refer to the competence to identify and express emotions, understand emotions, assimilate emotions in thought, and regulate both positive and negative emotions in testwiseness (Matthews, 2015). A relatively new concept, the idea of emotional intelligence is seen by some as another approach to defining social and practical intelligence. Emotional, social, and practical intelligence have been referred to as the nonacademic intelligences (Sternberg & Detterman, 2016) and the non-intellective intelligences (Hein, 2015). Whether or not emotional, social, and practical intelligences are distinct or overlapping constructs remains controversial, as does Gardner's theory of multiple intelligences. However, there remains considerable interest in the concepts of interpersonal and intrapersonal intelligences, the major components of emotional intelligence.

Emotional intelligence plays an important role in the testwiseness in a different culture because nonverbal communication of emotions varies from culture to culture (Morris & Maisto, 2017). For example, hand gestures have specific meanings in a particular culture which may be very different from another culture. The emotional disturbance in expatriate may negatively affect the testwiseness among undergraduate students. Undergraduate students in emotional states, like anxiety, anger or depression, seldom takes information efficiently or deal with it well (Goleman, 2016).

Another variable to be considered on testwiseness among undergraduate in southwest universities is peer acceptance. In every society, there exist groups that are part of the larger society but whose members adhere to norms and values that favour the testwiseness of the norms of the larger society. Individuals in society will usually make friends or have their closest associates from among their peer groups. Therefore, peer associates or acceptance have a great influence on the lifestyle of their members. Peer acceptance association as an agent of socialization, determines to a large extent, what social codes an individual learns (Nsofor, 2018). This implies that individuals whose core group members believe and act substance abuse within norms will learn and internalize more of substance abuse codes than those that conform with the norms of the society.

Peer acceptance has their own cultures, sanctions or rituals into which members are socialized and accordingly, members (especially new members) who do not comply with any of these may be ostracised (Carlson, 2015). Peer influence extends to all groups. Peer acceptance refers more specifically to the cluster of associates who know each other and serve as a source of reference or comparison for one another (McCarthy, 2018). Peer acceptance describes the various ways in which people of similar age, sometimes similar in height, class and the status which include the adults in the society that relate and adjust to each other (Oladipupo, 2015). It is also noted that though undergraduate students may have friends in another neighbourhood or town, the peer acceptance that has a direct impact is the one that dominates the undergraduate students' daily life settings.

### **Statement of the Problem**

Education and social values in Nigeria have deteriorated to the extent that undergraduate students' do not have the required impetus to see the need to acquire knowledge due to negative effect of testwiseness which affect their academic pursuit. Thus, it has affected

greatly the educational sector of the country than any other sector. There have been reports of persistent poor testwiseness among undergraduate students in southwest universities. Scholars have attributed this to the low self-confidence, lack of emotional intelligence, poor leaning styles and unqualified lecturers who themselves have no proper mastery of the test construction among other factors. For some decade now, the issues on testwiseness among undergraduate in southwest universities have been a debate among the policy makers, researchers, government and counsellors, the school administrator and the school managers. Evidence available shows that most students do not perform well in testwiseness among senior secondary school students (Mustapha, 2019). Undergraduate students exposed to a large number of tests during the educational process both objective and articular, and have a role in important decision-making of undergraduate students, most of the lecturers found the differences between undergraduate students in the school material is due to abilities differences , but it's easy to discover from the feedback of the tests that test-wiseness has a role in determining these differences and it refutes their assumptions, and that some undergraduate students complain of not getting high marks that fit their preparations and their best effort for the tests, and on the contrary, others show their satisfaction with the degree which they get compared to their effort and their willingness to test. Although, it is possible to increase the overall test performance, which in turn makes it difficult to ascertain the true score and ability of the test takers since the scores will only reflect the testwiseness skills of the students . It is also a source of test variance among testees performance in tests or examinations. Furthermore, there is the tendency for students who possess testwiseness skills to have a meaningful advantage over their counterparts. Knowledge of undergraduate students' testwiseness skills in any subjects will facilitate its use. There are inadequacies in the existence of standard testwiseness that reflect the educational and cultural milieu of Nigerian undergraduate students. Their inability to perform well in the testwiseness has been attributed to various reasons, one of which is student related factors. These factors include peer rejection, poor learning styles, lack of self-confidence and emotional intelligence. Studies have shown that these factors have the potential of influencing testwiseness especially in all the core subjects' area. Given this gap, this study intends to investigate the effect of emotional intelligence and peer acceptance on testwiseness among undergraduate in southwest universities

### **1.3 Purpose of the Study**

The broad purpose of this study is to investigate the effect of emotional intelligence and peer acceptance on testwiseness among undergraduate in southwest universities. Specifically the objectives of the study are to:

- i. examine the relationship that exists between the independent variables (emotional intelligence and peer acceptance) and the dependent variable (testwiseness) among undergraduate in southwest universities.
- ii. determined the joint contribution of the independent variables (emotional intelligence and peer acceptance) and the dependent variable (testwiseness) among undergraduate in southwest universities.
- iii. established the relative contribution of each of the independent variables (emotional intelligence and peer acceptance) and the dependent variable (testwiseness) among undergraduate in southwest universities.

### **1.4 Research Questions**

The following research questions were formulated to guide the conduct of this study and were answered in the study:

1. What pattern of relationship exists between independent variables (emotional intelligence and peer acceptance) and testwiseness among undergraduate in southwest universities?
2. What is the joint contribution of the independent variables (emotional intelligence and peer acceptance) and testwiseness among undergraduate in southwest universities?
3. What is the relative contribution of the independent variables (emotional intelligence and peer acceptance) and testwiseness among undergraduate in southwest universities?

## **METHODOLOGY**

### **Research Design**

The descriptive survey research design was adopted for the study. This is considered appropriate because, it is an empirical method which presents a description of events as they were and the variables were not manipulated. The design also enhanced easy collection of factual information about the emotional intelligence and peer acceptance on testwiseness among undergraduate in southwest universities.

### **Population of the Study**

The population of the study is comprised of all undergraduate students in southwest universities.

### **Sample and Sampling Technique**

A purposive sampling technique was employed in the study to select Three hundred (300) participants. Also a simple random sampling was adopted to select schools from two universities in south-west, Nigeria.

### **Instruments**

Three research instruments used for the study namely, Test-wiseness Scale (TWS), Emotional Intelligence Scale (EIS) and Peer Acceptance Scale (PAS)

### **Test-Wiseness Scale**

Test-wisness scale was developed by Grych, Seid and Fincham, (1992). This consists of 25 items with a response format ranging from 1 = Once in the past year, 2 = Twice in the past year, 3 = 3-5 times in the past year, 4 = 6-10 times in the past year, 5 = 11-20 times in the past year, 6 = More than 20 times in the past year, 7 = Not in the past year. The author reported an internal reliability co-efficient (alphas) ranging from .78 to .93.

**Emotional Intelligence Scale**

This was adopted from Schutte, Malouff, Hall , Haggerty , Cooper and Dornheim (1998). It contains 33-item scale with a likert format ranging from Strongly Agree (SA) = 1; Agree (D) = 2; Neutral (N) = 3; Disagree (D) = 4; Strongly Disagree (SD) = 5. It is designed to measure how emotional intelligence affects the student choice of career. Based on Cronbach’s alpha, has been reported to .77

**Peer Acceptance Scale**

The peer acceptance scale developed by Garret (1981). This consists of 28 items with a response format ranging from Strongly Disagree = SD to Strongly Agree = SA. The author reported an internal reliability co-efficient (alphas) ranging from .94 to .97.

**Administration of the Instrument**

The instrument was personally administered to the respondents by the researcher with the help of some research assistant at the designated universities. The instruments were administered among the universities students in south-west. The respondents were assured that their responses were meant for research purpose only. The researcher further assured participants of the confidentiality of the information provided. Questionnaires were distributed and collected immediately after participants responded.

**Method of Data Analysis**

Pearson product moment correlation was used to test the relationship among the independent variables and the dependent variable while Multiple Regression Analysis was used to analyse the joint contribution and the relative effect of the independent variables on the dependent variable

**RESULT**

**Research Question One:** What pattern of relationship exists between the independent variables (emotional intelligence and peer acceptance) and testwiseness among undergraduate in southwest universities of Nigeria?

**Table 1:** Correlation matrix showing the relationship between study variables.

	Mean	SD	1	2	3
Test-wisness	43.14	7.11	1.000		
Emotional intelligence	85.22	7.19	.510**	1.000	
Peer acceptance	34.12	7.09	0.212**	-.041	1.000

\*\* Correlation significant at 0.05 level

Table 1 above reveals there was significant relationships between each of the independent variables: emotional intelligence (r = 0.510, p < 0.05); peer acceptance (r = 0.212, p < 0.05) and test-wisness among the participants.

**Research question Two**

What is the joint contribution of emotional intelligence and peer acceptance on test-wisness among the study participants?

**Table 2: Multiple Regression Analysis on joint contribution of the variables**

Multiple R	= 0.913				
Multiple R <sup>2</sup>	= 0.833				
Multiple R <sup>2</sup> (Adjusted)	= 0.831				
Standard Error of Estimate	= 3.71435				
Source of Variation	Sum of Squares	df	Mean of Squares	F-Ratio	P
Regression	23761.043	2	5940.261	430.579	.000
Residual	4759.746	297	13.796		
Total	28520.789	299			

The table 2 above shows that there was joint effect of the independent variables (emotional intelligence and peer acceptance) on the test-wisness of among undergraduate in southwest universities of Nigeria (R = 0.913, p<.05). The combination of the independent variables accounted for 83.1% (adjusted R<sup>2</sup> = 0.831) of the total variance in the prediction of test-wisness among undergraduate in southwest universities of Nigeria. The analysis of variance of the multiple regression data yielded an F-ratio value which was found to be significant at 0.05 Alpha level (F = 430.579, p < 0.05). This shows that the independent variables jointly contributed to test-wisness.

**Research Question Three**

What is the relative contribution of the variables in predicting test-wiseness of undergraduate in southwest universities of Nigeria?

**Table 3: The relative contribution of each of the Independent Variables to test-wiseness of undergraduate in southwest universities of Nigeria**

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Remark
	B	Std. Error	Beta			
(Constant)	4.449	3.314		1.343	.000	Sig
Emotional intelligence	.545	.067	.410	5.537	.000	Sig
Peer acceptance	.321	.120	.128	2.675	.000	Sig

*a Dependent Variable: test-wiseness*

Table 3 indicates the contributions of each of the independent variables to the prediction of test-wiseness of undergraduate in southwest universities of Nigeria. In terms of magnitude of the contribution: emotional intelligence contributed most to the prediction of test-wiseness of the students ( $\beta = 0.410$ ,  $t = 5.537$ ,  $p < 0.05$ ) followed by peer acceptance ( $\beta = 0.128$ ,  $t = 2.675$ ;  $p < 0.05$ )

**Discussion of findings**

In response to research question one which asked what pattern of relationship exists between the independent variables (emotional intelligence and peer acceptance) and testwiseness among undergraduate in southwest universities of Nigeria. It was found that there was significant relationship between independent variables (intelligence and peer acceptance) and testwiseness among undergraduate in southwest universities. This finding is in line with the finding of Simons-Morton, Haynie, Crump, Eitel, Saylor (2001) who found that emotional intelligence can promote students test-wiseness. Harris, (2000) found that emotional intelligence were significantly correlated with university students' test-wiseness. A number of studies have shown that the emotional intelligence significantly affects test-wiseness among university students. Elliot and Gramling (1990) found that emotional intelligence helps the college students to heightened test-wiseness. They also found that emotional intelligence could help the students manage and heightened their test-wiseness. Matthews (2004) who found that emotional intelligence could act as a positive factor that could increase test-wiseness among college students. A study by Wentzel (1998) found that emotional intelligence provides motivational influence on students' test-wiseness. This study is supported by the findings by Quomma and Greenberg (1994) who found that high emotional intelligence from these sources would lead to high test-wiseness among college students.

The result shows that there was significant relationship between peer acceptance and test-wiseness. This assertion is in line with the findings of Williams (1994) reported that the influence of peer acceptance was stronger on test-wiseness. Peer acceptance also may have a greater influence on test-wiseness (Moffitt, 1993). It also supports the findings of Friedlander, Reid, Shupak and Cribbie (2007) reported on peer group. It was found that peer group who was happy with test-wiseness and increased their emotional stability on test. This study supports the findings of Garret (1981) reported that peer acceptance plays a positive role on test-wiseness activities. They also found that peer influence could help the student's test-wiseness among college students. Kelly and Emery, (2003) in their finding shows that students have greater emotional stability when with their peers that has such acts. Furthermore, a positive correlation between peer acceptance and test-wiseness has been reported by Nahid and Sarkis, (1994) in that high level of peer acceptance have been associated with high level of test-wiseness in college students. Peer acceptance was found to be one of the most important positive factors for students' test-wiseness (Tao, Dong, Pratt, Hunsberger, & Pancer, 2000). Hirschi (1996) reported that peer acceptance have been found to increase the impact of test-wiseness among students. Without enough support from friends, they would be low difficulty in learning outcomes and enhance student's test-wiseness.

In response to research question two which asked what is the joint contribution of emotional intelligence and peer acceptance on test-wiseness among the study participants. The result shows that there was joint effect of the independent variables (emotional intelligence and peer acceptance) on test-wiseness. The combination of the independent variables accounted for 83.1% of the total variance in test-wiseness. The analysis of variance of the multiple regression data yielded an F-ratio value which was found to be significant. The ANOVA results from the regression analysis also attests to the causal effect of the independent variables on the dependent variables; hence, the rejection of the null hypothesis. In line with this finding, a combination of variables like emotional intelligence and peer acceptance has been observed by Pajare and Adegbite (2008) on test-wiseness while the combination of variables like peer influence and emotional intelligence have also been observed by Finn and Allen (2002) on test-wiseness among college students.

In response to research question three which asked what is the relative contribution of emotional intelligence and peer acceptance on test-wiseness among the study participants. The result of the third research question on the relative effect of each of the variables

has also been significant. In all academic work as a whole, it is revealed that the degree of peer acceptance and emotional intelligence is very relevant to an actualization of test-wiseness among undergraduate students. This finding is corroborated by the study of Ryan (2006); Simon (2007); Adika (2009) who found that the above variables have independent effect on test-wiseness among undergraduate students. Adedipe (2005) that emotional intelligence helps the college students to be emotionally stable and enhance test-wiseness. Also, that peer acceptance support could help the college students manage and lessen their academic problems. It is also in contrary with the findings of Holley (2011) who found that peer acceptance could act as a protective factor that could increase test-wiseness among students such as motivation. Finn and Allen, (2002) that college students from positive peer group have been found to have fewer test-wiseness problems than college students that lack peer acceptance. Adedipe (2005) in their finding shows that universities students have lesser test-wiseness problems when such students have positive peer acceptance and enhance academic achievement.

### **Conclusion**

This research work has established that, there is a positive relationship between emotional intelligence and test-wiseness. Positive relationships were also found between peer acceptances on test-wiseness of universities students. The independent variables, when combined together had positive effect on test-wiseness.

This study has provided more details to the existing information on the test-wiseness as a factor that required immediate solution. From this template, it becomes clear that various strategies should be design to access the issue of test-wiseness in different institutions, attention should also be given to the identified means or factors through which the researcher has been able to identify that can affect the test-wiseness of universities students through the type of peer acceptance they originated from and emotional intelligence.

Likewise, in considering the findings of the study it could be concluded that the universities must also be considered when appraising the test-wiseness of universities students. Hence in Nigeria, the tertiary institutions should not only be responsible for the shaping of the test-wiseness but also the home from which individual student(s) originated from should be examined intensively. Nonetheless, there is need for replication and refinement of this work in the future.

### **Recommendations**

In Nigeria, though many governmental and non-governmental agencies, school administrator, students, educationist, counsellors, researchers and the policy maker have sprung up to assist in combating the issue of test-wiseness in various tertiary institutions at all level, but is surprising to note that much has not been achieved. In fact, during the field administration of the questionnaires, it was clear that the environment through which the universities students are learning is not conducive for learning, also most of the universities students are not happy with the schedule of their timetable cum practical class in which can affect the test-wiseness. Based on the findings of this study it is recommended that:

- ✓ It is obvious that universities students should have proper guidance services with a competent institutions counsellor to counsel students so as to lessen their anxiety, fear and enhance their test-wiseness and self-confidence to those universities students experiencing academic challenges in tertiary institutions.
- ✓ There is need for personal social, group counselling and individual counselling in tertiary institutions where universities students with challenged homes are counselled. And students should develop positive self-concept in life to assist them in their test-wiseness.
- ✓ There should be provision of appropriate counselling intervention programme and improvement in guidance and counselling services through expansion of counselling centres in tertiary institutions, and above all, it is recommended that lecturers and counsellors themselves should be encouraged to attend workshops and conferences on counselling so that they may be conversant with the new trends in teaching strategies and counselling practices.

### **REFERENCES**

- Adedipe, A.A. (2005). An Assessment of Academic Stress among Undergraduate Students: The Case of University of Botswana. *Educational Research and Review*, 4(2), 63-70.
- Adegbite, O. (2008). Effect of Peer and Emotion on the test-wiseness of Undergraduate students in University of Ibadan. An (Unpublished) B.Ed project, University of Ibadan
- Adika., L. (2009). The relationship between personality, study methods and academic performance. *British Journal of Educational Psychology*, 40(2), 132-142
- Ahmed, L. M and Bruinsma, R. A. (2016). Designing and conducting survey research: *A comprehensive guide*. San Francisco, CA: Jossey-Bass.
- Ajeigbe, T. O., and Afolabi, E.R.I. (2018). A study of item response and anchor bias in economics objective tests among senior secondary school students in Osun State. *Academic Journal of Interdisciplinary Studies*, 2(3), 173-179.
- Alade, O.M & Ogbo, A.C (2018). A comparative study of chemistry students' learning styles preferences in public and private schools in Lagos Metropolis. *IOSR Journal of Research and Method in Education*, 4(1), 45-53.

- Alfonseca, E., Carro, R. M., Martín, E., Ortigosa, A., and Paredes, P. (2016). The impact of learning styles on student grouping for collaborative learning: A case study. *User Modeling and User-Adapted Interaction*, 16(3-4), 377–401. doi: <http://doi.org/10.1007/s11257-006-9012-7>
- Allan, A. (2016). Development and validation of a scale to measure test-wiseness in EFL/ESL reading test takers. *Language Testing*, 9, 101-121.
- Anderson, J. (2016). Meta cognitive awareness in language testing and teaching: using think-aloud protocols. Paper presented at third Annual Meeting, Midwest Association of Language Teachers “Crossing Boundaries”, University of Michigan, Ann Arbor, Michigan, and May 11-12.
- Bachman, L. (2019). *Fundamental considerations in language testing*. Oxford, UK: Oxford University Press
- Bar-On, R. (2015). *Bar-On Emotional Quotient Inventory: Technical Manual*. Toronto, Canada: Multi-Health Systems
- Baumeister, R. F. (2015). “Attitudes towards Abortion and Contraception among College School girls”. *International Journal of Gynecology and Obstetrics*. 20 (5), 409 – 412
- Brown HD (2017). *Principles of language teaching and learning*, (4th ed.). New York: Longman Press
- Carlson, L.B. (2015). Trends in Peer Influence and Premarital Sex in the United States, 1954-2003, *Public Health Reports*. Vol.112 (6), 29-36.
- Celce-Marcia, M (2016). *Teaching English as a second or foreign language*, (3rd ed.). New York: Dewey Publishing Services
- Chance, S. L. (2017). Utilizing Test Wiseness To Improve Test Scores in Reading for Eighth Grade Students. Unpublished Dissertation. Nova University. South Florida
- Cohen, A. D.(2017). “I want to go back to the text”: Response Strategies on the Reading subtest of the new TOEFL. *Language Testing*, 24 (2), 209-250.
- Diamond, J. J (2017). An investigation of the cognitive correlates of Test-Wiseness. *Journal of Educational Measurement*, 9 (2), 145-150.
- Dodeen, H. (2019). Test-related characteristics of UAEU students: Test anxiety, test-taking skills, guessing, attitude towards tests and cheating. *Journal of Faculty of Education*, 26, 37-66
- Dodine , H (2015).Teaching strategies to provide tests, the Qatari National Committee For Education, Culture and Science, *Journal of Education Psychology*, No. 102 in March, pp. (102-117).
- Dolly, J. P. and Williams, K. S. (2016). Using test-taking strategies to maximize multiple-choice test scores. *Educational and Psychological Measurement*, 46, 619 – 625.
- DuPlessis, S. K. (2015). Relations with parents and school and Chinese adolescents’ self-concept, delinquency and academic performance. *British Journal of Educational Psychology*, 62, 193-202.
- Ebell, E.S and Frisbie, L. (2015). *Essentials of Educational Measurement* Pron Engle Wood Cliff, New Jersey Prentice Hall.
- Ebell, R.L. (2016). *Essentials of Educational Measurement* Pron Engle Wood Cliff, New Jersey Prentice Hall.
- Fine, M. A. (2018). Long-term effects of divorce on parent-child relationships. *Developmental Psychology*, 19, 703–713.
- Finn, M & Allen, K (2002). *Essentials of learning* (3rd Ed.) New York, Macmillan Publish company
- Fleming, N. (2015). Introduction to VARK. Retrieved from <http://legal.hazard.kctcs.edu/VARK/intro>
- Gabriel, M. Cheboswony, A.M, Kodero, S.L and Misigo, M.A. (2019). The impact of self-concept, depression on infant development. *Journal of Child Psychology and Psychiatry*, 33, 543–561
- Garret, H.E (1981). Resistance in Peer Acceptance: *Statistics in Psychology and Education*. Bombay; Allied Pacific Press
- Goleman, D. (2016). *Emotional Intelligence*. New York: Bantam Books
- Graf, S., Liu, T. C., and Kinshuk, O. 2015. Analysis of learners navigational behavior and their learning styles in an online course. *Journal of Computer Assisted Learning*, 26(2), 116-131.
- Grych, J. H. Seid, A.M and Fincham, F. D. (1992). Assessing peer conflict from the child’s perspective: The children’s perception on inter-parental conflict scale. *Journal of Child Development*, 93, 568-581.
- Hein, K (2015). *Positive psychology: Theory, research and applications*. Berkshire, England: Open University Press.
- Holley, N.B. (2011). Birth-order differences in self-attributions for achievement. *The Journal of Individual Psychology*, 56(4), 474-480.
- Houston, S. E. (2015). Test-wiseness training: An investigation of the impact of test-wiseness in an employment setting. Unpublished Ph.D Dissertation. The Graduate Faculty of The University of Akron
- Keefe, J. (2018). *Profiling and Utilizing Learning Style*. NASSP Learning Style Series.
- Klement, M. (2017). How do my students study? An analysis of students’ of educational disciplines favorite learning styles according to VARK classification. *Procedia - Social and Behavioral Sciences*, 132, 384–390. doi: <http://doi.org/10.1016/j.sbspro.2014.04.326>
- Ma, V. and Ma, X. (2017). A comparative analysis of the relationship between learning styles and mathematics performance. *International Journal of STEM Education*, 1(3), 1-13.
- Marsh, C. J. (2015). *Becoming a teacher: Knowledge, skills and issues* (3rd Ed.). Sydney: Pearson Education Press.
- Matthews, G. (2015). *Emotional Intelligence: Science and Myth*. Cambridge, MA: MIT Press.
-



- Mayer, J. D., and Salovey, P. (1997). What is emotional intelligence? In P. Salovey and D. J. Sluyter (Eds.), *Emotional Development and Emotional Intelligence: Educational Implications* (pp. 3–34). New York, NY: Basic Books, Inc.
- Mayer, J. D., Salovey, P., and Caruso, D. R. (2016). A further consideration of the issues of emotional intelligence. *Psychological Inquiry*, 15, 249–255
- McCarthy, T. D. (2018) Peer Influence and Sexual abuse of children.” *The Future of Children*. Vol. 4 No. 2 P. 31-53.
- Melhem, S (2019). Measurement and Evaluation in Education and Psychology. Amman: Dar Al-Maserah.
- Miller, P. M., Fuqua, D.R and Fagley, N.S (2018). Factor structure of the Gibb experimental test of test-wiseness. *Educational and Psychological Measurement*, 50, 203-208.
- Millman, J.; Bishop, C. H.; and Eble, R. (2016).An analysis of test wiseness. *Educational and Psychological Measurement*, 25 (3), 707-726
- Morris, S., and Maisto, M. P. (2017). Individual differences in the nonverbal communication of affect: The Diagnostic Analysis of Nonverbal Accuracy Scale. [Empirical Study]. *Journal of Nonverbal Behavior*, 18, 9–35
- Morse, D. T. (2018).The relative difficulty of selected test-wiseness skills among college students. *Educational and Psychological Measurement*, 58(3), 399 – 408.
- Mruk, R. A. (2016). The social cognition of gifted adolescents: An exploration of the stigma of giftedness paradigm. *Roeper Review*, 16(1), 37-40
- Mustapha, A.Y. (2016).Strategies for a more potent cure for examination malpractice. *Journal of the Nigerian Society for Educational Psychologists (NISEP)*, 4(1), 79-86
- Mustapha, A.Y. (2017). Analysis of psychometric properties of Junior Secondary School Certificate Mathematics Examinations in Plateau State. Unpublished P.hD. Thesis, University of Jos, Nigeria
- Mustapha, A.Y. (2019). A survey of secondary school teachers’ level of possession of test-taking skills in Jos Metropolis of Plateau State. *Journal of Educational Technology and Instruction (JETI)*, 1(9) 67-70.
- Nsofor, A.G. (2018). Peer Influence and Cognitive psychology: An introduction. In W. K. Estes (Ed.), *Handbook of learning and cognition* (pp. 25-80). Hillsdale, NJ: Erlbaum.
- Odeh, A (2018). Measurement and Evaluation in the Teaching Process. *Journal of Educational Psychology* 2(2) 120-130
- Odumosu, M. (2019). Recent studies in self-concept: Overview, with selected implications for clinical work. (Ed: Goldberg, Susan; Muir, Roy; Kerr, John. Attachment theory: *Social, Developmental, and Clinical Perspectives*. Hillsdale, NJ, US: Analytic Press.
- Oladipupo, E.R. (2015). Gender of Social Class Differences in Change’s in Attitude Towards premarital Coitus”. *Sociological and Social Research*. 62, 279 –286.
- Olatunde, P. (2019). Students attitude towards mathematics and academic achievement in some selected secondary schools in southwestern Nigeria. *European Journal of Scientific Research*, 36(3): 336-341
- Omar, N., Mohamad, M. M., and Paimin, A. N. (2018). Dimension of Learning Styles and Students’ Academic Achievement. *Procedia - Social and Behavioral Sciences*, 204, 172–182. doi: <http://doi.org/10.1016/j.sbspro.2015.08.130>
- Pour-Mohammadi, M and Jafre, M.Z. (2017). Test-taking strategies, Schema theory and reading comprehension test performance. *International Journal of Humanities and social Sciences*. 1(16).
- Rogers, W. T and Bateson, D. J. (2015). The Influence of Test-Wiseness on Performance of High School Seniors on School Leaving Examinations. *Applied Measurement in Education*, 4, 159-183.
- Ryan, K. (2006). Student achievement and the changing American family. Santa Monica, CA: RAND Corporation
- Salovey, P., and Mayer, J. D. (2017). Emotional intelligence. *Imagination, Cognition and Personality*, 9, 185–211.
- Sampson, D., and Karagiannidis. C. (2017). Personalized Learning: Educational Technologies and Standardization Perspective. *Interactive Educational Multimedia*, 4, 24-39.
- Sanchez, P. and Rhoda, M. (2017). Intergenerational transmission of parental bonding among women. *J Am Acad Child Adolesc Psychiatry*; 36:1134-1139.
- Schutte , Malouff , Hall , Haggerty , Cooper , Golden Dornheim (1998).Emotional Intelligence affect Student Career. *Journal of the Management Training Institute*, 36 (2), pp. 52--55.
- Scruggs, T. E. and Mastropieri, M.A. (2015). Assessing test-taking skills. Cambridge: Brookline Books
- Shavelson, J. (2016). The Relation of Parenting, Child Concept and Attachment Security in Early Childhood to Social Competence at School Entry. *Journal of School Psychology*, 51:643-658
- Simon, S. (2007). Effects of parenting styles on adolescent’s personality and test-wiseness within families. *Psychological Science*, 10(6), 482-488. doi:10.1111/1467-9280.00193
- Sternberg, R. J. and Detterman, A.N (2016). The Triarchic Mind: A New Theory of Human Intelligence. New York, NY: Penguin.
- Weiten, S., Dunn, N. and Hammer, J.D.(2017). Consistency and change in maternal child rearing practices and values: A longitudinal study. *Child Development*, 62, 190-198
- Woolfolk, E.C. (2018), Introduction to Self-confidence. New York city, New-York Press Ltd. P. 180
-

