

CLASS ATTENDANCE AND ACADEMIC PERFORMANCE IN BANKING AND FINANCE COURSES: CROSS-LEVEL COMPARISON**Clement Adewole, Ph.D.**Department of Banking and Finance, University of Jos
adewolec@unijos.edu.ng**Abstract**

The poor academic performance of students in tertiary institutions in Nigeria is a cause for concern, and may be attributed to absenteeism. This work determined the relationship between academic performance and class attendance and ascertained the appropriateness of the 75% minimum class attendance requirement. It determined the incidence of absenteeism at different class levels with a view to having more insight on an appropriate remedial approach. Pearson correlation, paired sample t test and ANOVA were applied on secondary data of 686 observations of class attendance records and examination scores obtained between 2016 and 2021. The result of the Pearson correlation test showed that there is a significant positive correlation of 0.4120 between class attendance and continuous assessment scores and correlation is significant at the 0.01 level (2-tailed). Similarly, the result of Pearson correlation test further showed that there is a significant positive correlation of 0.266 between class attendance and examinations scores. Paired sample t test showed a significant difference in performance of students with low attendance (less than 75%) and students with high attendance (not less than 75%). Results of the one-way ANOVA at sig 0.000 and $F=13.614$ showed that there is a statistical difference in attendance between the three class levels. Class attendance in the conventional manner should be encouraged and regulated, while the virtual learning system is being worked upon to be a perfect substitute of the regular class system; and there should be no one-size-fits-all-class approach to dealing with absenteeism across class levels.

Keywords: Absenteeism, Academic Performance, Class Attendance**1.1 Background of the Study**

The dismal academic performance of students in tertiary institutions in Nigeria is a cause for concern, and may be attributed to several factors. Olatunji et al (2016) wrote that academic performance of students in Nigerian institutions has been of much concern to all and sundry, and gave this as the justification for the need to assess the factors affecting performance of undergraduate students in construction related discipline in Nigeria. The same problem also applies to many other disciplines including Banking and Finance. There is an increasing number of spill-over students who are unable to graduate within the four-year period designed for the course due to inability to pass all the courses offered at each level, and average pass rate has not been encouraging.

Though there may be many factors responsible for poor academic performance in institutions, it is always convenient and may be rightly so, to attribute this to students' absenteeism. Students' absenteeism is a global issue which has been widely reported. In India, Harisha and Bhaskar (2017) reported that an average of 4.73-17.84% of students is absent almost every day either chronically or occasionally. Also studies in US show that student absenteeism is chronic (Garcia & Weiss, 2018). Nigeria is not an exception, and perhaps incidence of absenteeism is more chronic especially in public educational institutions. Learner absenteeism is an issue of concern especially in public schools in Nigeria (Juliana, Obun & Lawrence, 2019). Also, according to Ada, Arop & Okute (2019), learner absenteeism is an issue of concern

especially in public schools in Nigeria. Majgaard and Mingat (2012) did an empirical study of absenteeism in sub-Saharan Africa, and compared the results with some advanced countries, and found an average learner rate absence of 18-27% in sub-Saharan Africa, compared with 4% in advanced countries like the US, UK, Canada, Ireland, Switzerland, Germany and Israel.

A typical learning system is based on an assumption and requirement that learners should make themselves available to experience effective teaching. This explains why institutions give minimum attendance required to pre-qualify learners to sit for semester examinations. A number of factors make the enforcement of the minimum attendance difficult and sometimes impracticable. Such factors include poor time table management (Larabi-Marie-Sainte, Jan, Al-Matouq & Alabduhadi, 2021). Though there is lack of empirical evidence comparing effects of absenteeism in public and private tertiary institutions in Nigeria, it is expected that the rate would be much higher in public institutions where monitoring devices are weak. Also, since private institutions are much more expensive, learners may attach more value to the system and perhaps demand more from the system.

This paper adds to existing literature on the topic by further providing empirical evidence of the relationship between class attendance and academic performance, and in this case, in a federal government owned public tertiary institution. The work ascertains the appropriateness of the 75% minimum class attendance requirement in the institution, and determines the incidence of absenteeism at different class levels with a view to having more insight on the topic and determining policy implications of the findings. Specifically, the study determines: the relationship between class attendance and continuous assessment performance; the relationship between class attendance and examination performance; the difference between the academic

performance of students with 75% mandatory class attendance, and students with less than 75% attendance record; and a cross-level comparison of attendance records of students in second year (200 Level), third year (300 Level) and final year (400 Level).

1.2 Statement of Problem

A learning system is designed to impact knowledge. One of the ways to assess the effectiveness of the system is to examine learners and assess their pass rate or academic performance. Absenteeism has also been an issue of concern in schools in Nigeria (Ada, Arop & Okute, 2019), and this may be a factor determining performance of students in various programs. It is yet to be seen what the effect of the enforcement of the minimum 75% attendance requirement in Nigerian Universities would be. The regulation on minimum class attendance was introduced ostensibly to ensure regular classes are held with a view to improving learning and academic performance.

Causative factors for absenteeism include bad grades, illness, family and social circumstances, mental or emotional issues and level of motivation. Wadesango and Machingambi (2017) identified causes of student's absenteeism in the University as lack of subject interest, poor teaching strategies by lecturers, unfavourable learning environment, too much socialisation, part-time jobs to augment meagre salaries and poor relations with lecturers. The manner and extent to which these factors impact on students and result in truancy may depend on the student's age, gender, lecturer's approach to teaching, and peer pressure.

This leads to the fundamental assumption that dealing with absenteeism should be treated on class-by-class basis and not a general assumption on the nature of the problem or the solution to the problem. This might however seem to contradict Ocak, Ocak & Baysal (2017) who attributed

absenteeism to mainly psychological reasons. A critical look at this position may instead give credence to the fundamental assumption here because each class would shape the psychological composure of its students and influence their behaviour.

Education is core of human resource development, and academic performance is a key index of the level of education attained. Poor academic performance is a reflection of the ineffectiveness of the education system, and results in poor human resource development, low morale and enthusiasm, unemployability and a gloomy future.

Several studies have been done to investigate the effect of class attendance on academic performance. Most of these studies were done in US and UK, and in most cases, results showed a strong positive effect of class attendance on academic performance. These studies include (Ronier (1993), Andrietti & D'Addazio (2012), Fadelelmoula, (2018), and Ancheta, Daniel & Ahmad (2021). The issue of class attendance and academic performance has generated a lot of research interest but apparently there is still more to be learnt, for instance on how curriculum across levels of study influence attendance rate and the optimal study method that would significantly improve overall academic performance.

1.3 Hypotheses

- a. **H₀₁:** There is no relationship between class attendance and continuous assessment performance of banking and finance students
- b. **H₀₂:** There is no relationship between class attendance and examinations performance of banking and finance students
- c. **H₀₃:** There is no statistical difference between the performance of students with 75% class attendance and students with less than 75% class attendance

- d. **H₀₄:** There is no statistical difference in class attendance for different levels of study

1.4 Significance of the Study

Results of this study would guide educational policy makers on the propriety of having policies on minimum class attendance standard, and how such policies may be tweaked for different classes. Empirical evidence on a significant positive effect of the 75% regulatory minimum class attendance on academic performance would be a strong motivation for its enforcement, and contribute to the topical issue relating to the adequacy of exclusive virtual learning.

2.0 Literature Review

2.1 Conceptual and Empirical Review

Conceptually, academic performance is synonymous with school performance and academic achievement. Martinez (2007) as cited in Lamas (2015) described academic performance as the product given by the students and it is usually expressed through school grades. There are diverse ways of conceptualising academic performance, such as in terms of responsive abilities (Pizarro 1985, as cited in Lamas (2015), or meeting goals set in a program (Caballero et al, 2007, as cited in Lamas (2015). This study adopts the humanistic definition of Martinez (2007) in treating academic performance essentially as scores in different related courses. It refers to students results in standardised tests.

2.1.1 Class Attendance

Class attendance signifies the physical presence of students in class for full lecture periods, and it is measured in percentages of the total lecture periods as provided in the University calendar. Attendance may however go beyond physical presence to require active participation. As this require some measure of subjectivity, the conceptual definition for this study refers to student's physical presence in class. It is noteworthy however that there have been some suggestions that those who attend and participate in lectures and tutorials do better than those who simply turn up (Muir, 2009).

It is considered that regular attendance indicates that the academic learning process is not interrupted, and should lead improved academic performance.

Absenteeism is indicated when students are absent in classes, irrespective of reasons for their absence. It is the failure to attend class. Various factors have been suggested for students' absenteeism. The factors are complex, multi-faceted and include individual factors, family factors and school factors (Demir & Karabeyoglu, 2016). Interestingly, underscoring the reasoning in this paper, Demir and Karabeyoglu (2016) also asserted that absenteeism should be examined against individual characteristics, such as gender of the student, and the level of maturity in interaction with the school and family system. A time period may be attached in the definition of absenteeism as one of the dimensions, and causes or the legitimacy of the reasons for absenteeism. This study considers any absence from class as absenteeism irrespective of the reasons and measures the effect especially in cases over 25%.

2.1.2 Academic Performance

Academic Performance is the knowledge gained by the student which is assessed by marks by a teacher (Kumar, Agarwal & Agarwal, 2021). Factors that may influence Academic Performance according to Shahzadi and Ahmad (2011) include home environment, study habits, hardworking, learning skills and academic interaction. Academic performance in each course is basically assessed through continuous assessments and examinations results in the ratio 4:6. While continuous assessments in the banking and finance program, University of Jos cover 40% of the total grade, examinations cover 60%. Tertiary institutions do introduce mandatory class attendance to pre-qualify students to sit for the end of semester examinations. The minimum class attendance required in all federal Universities in Nigeria is 75%. University of Jos is expected to enforce this requirement for all programs.

It is expected that students with higher attendance record will perform better in both continuous assessments and examinations. Several studies support this. An earlier work by Ronier (1993) analysed the relationship between lecture attendance and examinations performance using attendance records in six sessions of 195 students and found that attendance had a positive significant impact on academic performance. Several other similar studies after this mostly pointed to a significant effect of attendance on performance.

Fadeleimoula (2018) found that class attendance had an effect on performance and noted no statistically significant differences were found in student attendance between the different courses. Dey (2018) also found a positive effect among students from a large public university in US. Interestingly the study also found that attendance effect was not uniform across race, gender and level of preparedness for the course. Sarker and Uchinlayen (2020) also reported a positive effect of attendance on performance among university students and further examined effect of compliance with the 80% regulatory attendance requirement. Through an independent t-test, it was found that significant difference existed between the two groups; students with more than 80% attendance achieved higher marks as opposed to students with less than 80% attendance. Aarti and Gareth (2021) analysed statistical data for two consecutive cohorts of undergraduate students and also found a positive effect underscoring the importance of attending lectures to achieve high academic results.

In a study of a Nigerian private University, Oladipupo, Daramola, Oyelade & Afolabi (2017) found that the impact of class attendance on academic performance is actually low, and that major factors that determine performance include student participation in class, personal study and group study. Fee structures and availability of learning materials differ significantly

among these institutions and may impact on results. Adegoke, Salako and Ayinde (2013) studied the impact of attendance on performance in ICT related courses in a state-owned polytechnic and found it positive, though a weak correlation of 0.298. Ayodele (2017) also found a significant effect of attendance on academic scores in a private university.

A few studies however introduced some control variables in the relationship between class attendance and academic performance, such as race and gender. Cortright et al (2011) introduced gender and found that the influence of regular attendance on examinations performance is more important for female than male students. Eisen et al (2015) also found that no statistically significant relationship between class attendance and student performance after adjusting for control variables that included age and gender. Also, interestingly Andrieth and D'Addazio (2012) found a positive and significant effect which however disappeared when panel data fixed effect estimators eliminated time-invariant specific unobservables. This suggests that often reported effect may actually be capturing impact of unobservables on academic performance. It is thus not enough to suggest an effect, but a follow up study with appropriate primary data to explain the results is important.

2.1 Theoretical Review

The Solow effect theory cited in Sekiwu, Ssempala & Frances (2020) explains the class attendance effect. The assertion in the theory is that school attendance is one of the major determinants of performance. The Solow effect shows the relationship between school attendance, academic performance and social productivity.

In the theory is a tripod of educational attainment, school attendance and academic achievement. It posits that academic achievement is the indicator for the level of human capital development attained; and the robustness of the human capital determines

the level of social productivity and development. There is a potential for advancing development through academic performance on one hand, and advancing academic performance through school or class attendance, which is the core of the analyses in this paper.

3.0 Methodology

3.1 Data

This study aggregated data from banking and finance courses in University of Jos, Nigeria selected by convenience sampling between 2015/2016 and 2019/20 academic years for a total of 686 observations obtained for three class levels as follows: 172 available observations from 200 Level; 310 available observations from 300 Level; and 204 available observations from 200 Level. These represent all classes with unbroken records of class attendance and performances between 2015/2016 session when the program commenced in the University till 2019/2020 session.

It is assumed that these observations will be representative of the wider academia as the demography and academic historical records (entry requirements) in Nigeria tertiary institutions are fairly similar and standard. Attendance records are in percentages while academic performance covers 40% for continuous assessment and 60% for examinations.

It was determined that the three variables of study (Class Attendance; and two measures of Academic Performance: Continuous assessment scores and examinations scores) are continuous and graphical and statistical tests confirmed linearity with the following preliminary test results:

- a. Graphics: Observation of curve shows normal distribution in all the variables (See Appendix 1)
- b. Q-Q Plot: Further observation shows normal distribution in all the variables (See Appendix 1)

- c. Statistical Tests: Shapiro Wilks test was conducted with the following results:
- At 0.008781 standard error (See Appendix 1), we tested for normality of the data sets to justify choice of analysis method and conclude that the distribution is normal. Also considering the Kurtosis test ($0.186/0.008781=21.18$), we conclude at 95% confidence level that the distribution is normal. Minor outliers (See Appendix 1) in the distribution will not significantly affect the distribution, analyses and results.
 - At 0.227933 standard error, we conclude that continuous assessment distribution is normal. The kurtosis test also further confirms the normality ($0.186/0.227933=0.816\neq\pm 1.96$). Six cases of minor outliers (See Appendix 1) will not significantly affect the normality and results of the analyses.
 - At 0.4365 standard error, we conclude that examinations results show a normal distribution. Kurtosis test further confirms this at $0.186/0.4365=0.4261\neq\pm 1.96$. Box plot (See Appendix 1) also reveals two minor outliers which will not significantly affect our analyses and results.

3.2 Methods of Analyses

Since our distributions have been proved to be normal, the first two hypotheses were tested using Pearson Correlation analysis to find out if there exist a positive correlation between class attendance and either continuous assessment or examinations performances. The third hypothesis was tested using paired sample t test to determine if there is a difference between performance of students with low class attendance (less than 75%) and students with high class attendance (over 75%). The

fourth hypothesis was tested using the one-way ANOVA to compare the means of class attendance at three different levels (200 Level, 300 Level and 400 Level)

3.3 Analyses and Results

a. Pearson correlation analysis was carried out to find out if there exist a positive correlation between class attendance and continuous assessment scores. The scatter plot indicates that there exists a linear relationship, while the box plots indicate that no major outlier exist. The normality test was carried out using Shapiro-Wilk and Kolmogorov Smirnov test which both indicate that the data was normally distributed and skewness and Kurtosis test indicate that the data is reasonably normally distributed. Homoscedasticity is assumed from the scatter plot. The result of the Pearson correlation test shows there is a significant positive correlation of 0.4120 between class attendance and continuous assessment scores (See Appendix 2). Correlation is significant at the 0.01 level (2-tailed). We thus reject the null hypothesis (H_{01}) and conclude that there is a significant relationship between class attendance and continuous assessment performance.

b. Pearson correlation analysis was carried out to find out if there exist a positive correlation between class attendance and examinations scores. The scatter plot indicates that there exists a linear relationship, while the box plots indicate that no major outlier exist. The normality test was carried out using Shapiro-Wilk and Kolmogorov Smirnov test which both indicate that the data was normally distributed and skewness and Kurtosis test indicate that the data is reasonably normally distributed. Homoscedasticity is assumed from the scatter plot. The result of the Pearson correlation test shows there is a significant positive correlation of 0.266 between class attendance and examinations scores (See Appendix 2). Correlation is significant at the 0.01 level (2-tailed). We thus reject the null hypothesis (H_{02}) and conclude that there is a significant

relationship between class attendance and examinations performance.

c. Paired sample t test shows a significant difference in performance of students with low attendance (less than 75%) and students with high attendance (not less than 75%). Null hypothesis (H_{03}) is rejected at standard error 1.47615 and SD of 19.63896 (See Appendix 3).

Mean total exams score for students who attained the minimum 75% attendance was 49.5% while mean score for students with less than 75% attendance was 42.2%.

d. Results of the one-way ANOVA shows that the null hypothesis (H_{04}) is rejected at sig 0.000 and $F=13.614$ (See Appendix 4). It is concluded that there is a statistical difference in attendance between the three levels.

4.0 Findings

The study found that there is a positive relationship between class attendance and both continuous assessment and examination performance. This is consistent with studies which showed a positive relationship between class attendance and performance. This suggests that class attendance is a critical factor for improvement in academic performance. This relationship is likely due to the 'academic interaction' factor in class attendance (Shahzadi & Ahmad, 2011). The relationship with continuous assessment is stronger ostensibly due to recency factors as regular attendance reduces the likelihood of missing out on routine directives on continuous assessments.

It was also found that there is a statistical difference between the performance of students with not less than 75% class attendance and students with less than 75% class attendance. Students with 75% and above attendance performed remarkably better than students with less than 75% attendance, suggesting that the policy on 75% minimum class attendance contributes to higher academic performance. Increasing this regulatory minimum class attendance

percentage has potentials for even more improvement in academic performance.

Incidences of absenteeism reduced progressively across levels as class attendance averaged 75.66% in 200 Level, 81.64% in 300 Level and 86.18% in 400 Level. This may be due to the program academic structure which has fewer core courses at higher levels, and also fewer students in higher classes with closer monitoring systems.

5.0 Conclusion and Recommendations

The research setting is particularly instructive given the dearth of empirical evidence of the relationship between class attendance and academic performance in a federal public tertiary institution. Determining this would have policy implications, particularly on regulating attendance requirements and virtual learning schemes, and understanding more the dynamics of attendance and performance at different levels of the degree program.

In addition to the empirical evidence relating class attendance to academic performance, two other issues stand out: First, the effect is stronger with continuous assessment compared with examinations. Second, incidence of absenteeism is strongest at 200 Level, and least at 400 Level. The study recommends as follows:

- a. Contrary to the position of advocates of exclusive virtual learning, class attendance in the conventional manner should be encouraged and regulated, while the virtual learning system is being worked upon to be a perfect substitute of the regular class system. Minimum class attendance should be increased to 80% as it has been demonstrated that this will translate into improved academic performance, and the minimum requirement should be enforced as a pre-condition for taking part in the semester-end examination.

- b. There should generally be an increase in contact periods, with virtual learning methods complementing the regular physical contact periods.
- c. The stronger effect of class attendance on continuous assessment performance may be reflecting the effect of recency and retentive ability of students. Lectures should be planned and delivered in a way to improve the retentive ability of students for better examinations performance.
- d. Absenteeism was found to be greater at 200 Level class. There should be no one-size-fits-all class approach to dealing with absenteeism across class levels. Strategies should be well thought out for each class bearing in mind the credit loads for each level, students motivation levels, average age of students in each class, lecturers experience and any other relevant factor.

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