

AKSU Journal of Social Sciences
(AKSUJOSS)
ISSN: 2504 – 933X
Vol.7,No.1 (April) 2026,pp.169-174
DOI: https://doi.org/10.61090/aksujoss.7.1.169-174
URL: htpp://www.aksujournal.com/vol.7.1

Received: January 21, 2026
Accepted: March 2, 2026
Published Online: March 11, 2026

Attitude and Self-Concept on Utilization of Information and Communication Technology among Undergraduate Library Users in Cross River State, Nigeria

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Abstract
This study explored the impact of attitude and academic self-concept on the utilisation of information and communication technology (ICT) among undergraduate library users in public universities in Cross River State, Nigeria. Guided by two research objectives and hypotheses, an ex post facto research design was adopted, utilising a multistage sampling technique to select 667 registered library users, representing 10% of the total population from two institutions. The research instrument displayed reliability estimates ranging from .77 to .83. Data were analysed using independent t-tests, Analysis of Variance (ANOVA), and Multiple Analysis of Variance (MANOVA), with all hypotheses tested at the 0.05 significance level. The analysis revealed that attitude had no significant effect on ICT utilisation among library users, whereas academic self-concept demonstrated a significant positive influence. Additionally, attitude towards school and educational qualification did not significantly affect ICT utilisation, highlighting the greater importance of academic self-concept. Based on these findings, it is recommended that universities encourage younger undergraduates to make greater use of library facilities and modern ICT resources, and further, that registration with the university library should be made compulsory from the first year of study to maximise the benefits of ICT in academic settings. This approach will likely enhance students' engagement with contemporary information resources and foster a stronger academic self-concept, thereby improving overall utilisation of ICT facilities among university library users.

Keywords: Attitude, self-concept, information and communication technology, library users.

Introduction

Information and Communication Technology (ICT) has significantly transformed the

development of libraries in Nigeria, influencing how information is managed, processed, stored, and disseminated. The information age, marked by the rapid adoption of modern ICT tools, has enabled libraries to efficiently handle both print and electronic resources, thereby enhancing access and retrieval for users. This technological revolution has affected all fields of knowledge, including librarianship, pressuring libraries, particularly academic ones, to integrate computers and telecommunication facilities for improved information services (Firdausa, 2022).

According to Firdausa (2022), a library can be understood both as a physical location and as an activity involving the collection and organisation of knowledge resources. Libraries hold diverse materials, books, periodicals, audiovisuals, and digital media, catering to the various needs of users. Attitude plays a crucial role in strengthening information and knowledge management strategies, often influencing user preferences and engagement with ICT. Additionally, self-

concept, which is multi-dimensional and shaped by both biological and environmental factors, significantly impacts how individuals interact with library technologies.

Self-concept is a learned attribute, reflecting how individuals perceive themselves across different dimensions, including social, emotional, and intellectual aspects. As people grow, their self-concept evolves through experience and social interaction, affecting their approach to ICT utilisation in libraries. Investigating the relationship between variables such as attitude and self-concept can guide educators and policymakers in developing strategies that promote effective ICT engagement among students. This study, therefore, explores the implementation and strengthening of ICT strategies among undergraduate library users in Cross River State, Nigeria, emphasising how self-concept and information management practices can enhance learning outcomes (Firdausa, 2022).

Statement of the Problem

The library serves as a hub for academic activities, drawing users, often voluntarily, due to their pursuit of knowledge. The integration of Information and Communication Technology (ICT) into library services has transformed operations, teaching, learning, and research, thereby attracting even more users. Despite these advancements, it has been observed that undergraduate students, particularly at the University of Calabar and the University of Cross River State, do not fully utilise the electronic resources and services available during their studies (Firdausa, 2022). For instance, the University of Calabar Library subscribes to several databases, including EBSCOhost, ProQuest, and African Journals Online (AJOL), offering over 1,000 digitised resources to users.

Similarly, the University of Cross River State boasts a well-established electronic library providing various internet services to students. Nevertheless, many students continue to rely predominantly on Google for information needed for their assignments, term papers, and research, despite the substantial investments in ICT infrastructure and resources by both institutions (Firdausa, 2022). Government agencies such as the Tertiary Education Trust Fund (TETFUND) and the Niger Delta Development Commission (NDDC) have made considerable efforts to develop ICT-driven academic libraries in Nigerian universities. The National Universities Commission (NUC) and other professional bodies have also ensured the availability of electronic information resources as a prerequisite for programme accreditation.

Despite these initiatives, the underutilisation of library ICT resources persists. Understanding the root causes of this issue requires examining factors such as user attitude, self-concept, and strategies for strengthening ICT engagement among library users at the University of Calabar (UNICAL) and University of Cross River State (UNICROSS), Nigeria (Firdausa, 2022).

Objectives of the Study

The main objective of this study was to examine attitude and self-concept on utilization of Information and Communication Technology among undergraduate library users in Cross River State Public Universities. Specifically, the study sought to:

1. Examine the influence of the attitude of undergraduate library users on utilization of information and communication technology among undergraduate library users in Cross River State Public Universities.
2. Find out the influence of self-concept on utilization of information and communication Technology among undergraduate library users in Cross River State public universities.

Literature Review

Alokluk (2020) investigated students' attitudes towards the use of library facilities at Newcastle University, United Kingdom, involving 60 students and 6 library staff. Data were collected using closed-ended questionnaires for students and structured interviews for staff. The findings

indicated a high rate of library usage, with 92% of students utilising the library and 49% visiting at least twice a week. The primary motivations included personal study, internet use, accessing library materials, reading newspapers, socialising, and using printing and photocopying services. Despite this, students expressed dissatisfaction with the availability of comfortable study spaces and demonstrated a lack of awareness regarding inter-library borrowing facilities, which were underutilised. The study concluded that while students' attitudes were generally positive, further recommendations were needed to enhance library service usage.

In a related study, Mensah et al. (2023) explored gender differences in ICT usage, self-efficacy, attitude, and anxiety among technical university students in Ghana. Using descriptive statistics, Mann–Whitney U tests, and ordered logistic regression on data from 409 students, the findings revealed that male students reported more frequent ICT usage, greater confidence and positivity, and lower anxiety compared to females. Access to computers and the students' level of study were linked to attitudes and perceived ICT self-efficacy. The authors recommended that higher education policymakers implement interventions to boost female students' self-confidence and competence in using ICT tools.

Self-concept, defined as an individual's perception of their attributes, abilities, and affiliations, plays a pivotal role in educational contexts. Schauffel et al. (2021) developed and validated the ICT-SC25 scale to measure self-concept related to ICT, demonstrating strong reliability across general and domain-specific dimensions. Similarly, Cachon-Zagalaz et al. (2020) examined the relationship between self-concept and smartphone use among university students, noting significant gender-based differences: women exhibited higher academic self-concept, while men scored higher in emotional and physical dimensions. Additionally, problematic smartphone use was identified in half of the students, with notable effects on academic and emotional self-concept.

Methods and Materials

The study employed an ex post facto research design to address its objectives, targeting a population of 6,808 registered library users from the University of Calabar (UNICAL) and the University of Cross River State (UNICROSS) during the 2021/2022 academic session. A multi-stage sampling method, incorporating both stratified and purposive techniques, was utilised: students were first stratified by year of study, after which only those registered as library users in the relevant session were purposively selected from each institution. The final sample comprised 667 respondents, including 387 from UNICAL and 280 from UNICROSS, thereby ensuring proportional representation and enhancing the validity of the findings. To determine the reliability of the research instrument, a pilot test was conducted with 50 users from Arthur Javis University's library, who shared similar characteristics but were not part of the main study. Cronbach's alpha analysis of the pilot data produced reliability coefficients between 0.77 and 0.83, confirming the instrument's reliability.

Table 1: Population distribution of university libraries and library users of the study

S/N	Names of university libraries	Population of users
1.	University of Calabar library	3872
2.	University of Cross River State library	2808
	Total	6880

Presentation and Interpretation of Result

Hypothesis One: Attitude does not significantly influence utilization of information and communication technology among library users in Cross River State.

The independent variable is attitude to school categorized as positive and negative attitude to school while the dependent variable is utilization of information and communication technology, measured continuously. To test this hypothesis, independent t-test was used, and the result as presented in Table 8 shows that (t= -0.170, p>.05). Since p the p-value is greater than p=.05 alpha level this implies that there is no significant influence of attitude on the utilization of information and communication technology among libraries users. Based on this result the null hypothesis was upheld.

Table 2: Independent t-test analysis of the influence of attitude on utilization of information and communication technology among library users

Dependent variables	Attitude	N	Mean	Std. Dev.	Std. Error	Df	t-cal	p-val
Utilization of ICT	Positive	461	13.2386	3.43630	1.6004	649	-.170	.865
	Negative	190	13.2895	3.52398	2.5566			

Hypothesis Two: Academic self-concept does not significantly influence utilization of information and communication technology among library users in Cross River State.

The independent variable is academic self-concept categorized as high, moderate, and low. The categorization was done using the score of the variable. The highest score was 40, while the lowest score was 1. Those that scored between 1 and 15 were categorized as those with low academic self-concepts; those that scored 16-25 were categorized as those with moderate academic self-concepts, while those with 26-40 were categorized as those with high academic self-concepts. While the dependent variable is utilization of information and communication technology, measured continuously. To test this hypothesis, a one-way analysis of variance was used, and the result as presented in Table 10 showed that (F= 35.367, p=.000).

Since p (.000) is less than p (.05), this implies that there is a significant influence of academic self-concept on utilization of information and communication technology among library users. A post hoc analysis was carried out using Fisher's LSD. The result in Table 11 showed that users with higher qualifications have a mean (X=14.8588) higher than those with secondary education (X=13.3440) and the mean of those with lower educational qualifications (X=12.1407). This implies that those with higher educational qualifications utilized the library better than those with lower educational qualifications. Hence, the null hypothesis is rejected, and the alternate hypothesis is upheld.

Table 3: One way analysis of variance (ANOVA) result on the influence of academic self-concept on utilization of information and communication technology among library users

Self-concept	N	Mean	Std. Dev	Std. Error
Low	263	12.1407	2.89498	.17851
Moderate	218	13.3440	3.41128	.23104
High	170	14.8588	3.68317	.28249
Total	651	13.2535	3.45948	.13559

Source of variation	Sum of Squares	Df	Mean Square	F-ratio	Sig.

Between Groups	765.576	2	382.788	35.367	.000*
Within Groups	7013.604	648	10.823		
Total	7779.180	650			

Discussion of Findings

The first hypothesis, which stated that there is no significant influence of undergraduates' attitudes on the utilisation of ICT among library users, was rejected. This suggests that students with a negative attitude are less likely to use ICT resources in the library compared to those with a positive attitude towards their studies. This finding aligns with the study by Mensah, Azila-Gbettor, Kugbonu, and Tahiru (2023), who investigated gender differences in ICT usage, self-efficacy, attitude, and anxiety among technical university students in Ghana. Their research, based on primary data from 409 students, revealed that male students reported more frequent ICT use, higher confidence and positivity, and lower anxiety about using computers and related applications. Furthermore, access to computers and the level of study were associated with students' attitudes and perceived ICT self-efficacy.

Similarly, the present findings are consistent with those of Issa, Ibrahim, Onojah, and Onojah (2020), who examined attitudes towards the utilisation of Open Educational Resources (OER) among undergraduates, as well as the influence of gender and area of specialisation. Their study found that undergraduates generally had a positive attitude towards using OER for learning. There was a significant difference in attitudes between male and female students, with males demonstrating a more favourable attitude, while no significant differences were observed based on area of specialisation. The study concluded that students' attitudes towards the use of OER for learning were predominantly positive.

Overall, these findings underscore the importance of positive attitudes in promoting the effective utilisation of ICT and related resources in academic environments. Addressing negative attitudes and enhancing students' confidence in using technology could further improve ICT adoption and engagement among library users.

The second hypothesis, which posited that there is no significant influence of academic self-concept on the utilisation of ICT among library users, was rejected. This outcome indicates that library users with a high academic self-concept utilise ICT resources more than those with a low self-concept in Cross River State. These findings are consistent with Agbatogun (2010), who examined the relative and combined contributions of computer anxiety, self-concept, and gender to teachers' attitudes towards ICT use. In his study involving 454 Nigerian teachers, it was found that the combination of these variables significantly predicted the teachers' attitudes towards ICT adoption.

Similarly, Dandona (2019) investigated the effect of ICT in education on the self-concept of school students. The research compared the self-concept of students taught using traditional pedagogy versus those taught with ICT-based methods. The results demonstrated significant differences in self-concept between the two groups, with boys taught through traditional methods exhibiting higher self-esteem than girls in the same teaching environment. These studies collectively underscore the crucial role of self-concept in influencing ICT utilisation and engagement in educational settings.

Conclusion and Recommendations

Based on the findings of the study, it was concluded that attitude to school and academic self-concept did not significantly influence utilization of information and communication technology among library users in Cross River State. The study therefore recommended as follows:

1. Younger users should be encouraged to intensify their use of the library so as to make use of modern facilities.

2. University should enforce the registration of students with the library compulsory from the first year of study.

REFERENCES

Agbatogun, K. K. (2010). The maintenance of statistical machine translation: Parameter estimation. *Computational Linguistics, 19*(7), 263–313.

Alokluk, J. A. (2020). Attitude of students towards the use of library facilities: A case study of Newcastle University, United Kingdom. *Library Philosophy and Practice*, 1–19.

Cachón-Zagalaz, J., Sanabrias-Moreno, D., Sánchez-Zafra, M., Zagalaz-Sánchez, M. L., & Lara-Sánchez, A. J. (2020). Use of the smartphone and self-concept in university students according to the gender variable. *International Journal of Environmental Research and Public Health, 17*(12), 4184. https://doi.org/10.3390/ijerph17124184

Cachon-Zagalaz, J., Sanabrias-Moreno, D., Sánchez-Zafra, M., Zagalaz-Sanchez, M. L., & Lara-Sanchez, A. J. (2020). Use of the smartphone and self-concept in university students according to the gender variable. *Sustainability, 12*(16), 6547. https://doi.org/10.3390/su12166547

Dandona, L. (2019). Acquisition of electronic resources in a library consortium: Some obstacles to its implementation in Africa. In Proceedings of SCAULWA 2005 Library Consortia Standing Conference of African University Libraries, Western Area.

Issa, A., Ibrahim, M., Onojah, A., & Onojah, A. A. (2020). Undergraduates' attitude towards utilization of open education resources. *Library Philosophy and Practice*, 1–20.

Mensah, C., Azila-Gbettor, E. M., Kugbonu, M. A., & Tahiru, F. (2023). Revisiting gendered ICT attitude and self-efficacy: A study of technical university students in Ghana. *Education Research International*, 2023. https://doi.org/10.1155/2023/11651

Mensah, S. O., Azila-Gbettor, E. M., Kugbonu, R., & Tahiru, A. A. (2023). Gender differences in information and communication technology usage, self-efficacy, attitude, and anxiety among technical university students in Ghana. *Education and Information Technologies, 28*, 1–18. https://doi.org/10.1007/s10639-023-11651-1

Schauffel, L. J., Schmidt, U., Peiffer, K. R., & Ellwart, W. (2021). Catalogues' perceptions and use of social media and conventional information sources for professional development. *Cataloguing & Classification Quarterly, 52*(2), 181–228.

Schauffel, N., Schmidt, K., Peiffer, H., & Ellwart, T. (2021). Self-concept related to information and communication technology: Scale development and validation. *Computers in Human Behavior, 116*, 106643. https://doi.org/10.1016/j.chb.2020.106643.