STUDY HABITS, INFORMATION SEEKING BEHAVIOUR, AND SELF-REGULATION AS DETERMINANTS OF LIBRARY UTILIZATION IN A NIGERIAN PUBLIC UNIVERSITY

Toyin Olanike Adaramoye
Department of Guidance and Counselling,
Faculty of Education, Federal University Oye-Ekiti, Nigeria
toyin.adaramoye@fuoye.edu.ng http/orcid.org/0000-0003-1970-9215

Mensah Prince Osiesi
Research Associate
Department of Adult and Education Foundations, iYunivesithi Walter Sisulu,
Republic of South Africa. princeosiesi@yahoo.com https://orcid.org/0000-0002-7660-6127.

Chinedu Hilary Joseph
Research Associate
Department of Continuous Professional and Teacher Development, iYunivesithi Walter Sisulu,
Republic of South Africa.
nedunwa28@gmail.com https://orcid.org/0000-0003-0593-821x

DOI: https://doi.org/10.64633/wissj.v10i9.09

Keywords

Library Utilisation, Information Seeking Behavior, Self-Regulation, Study Habits, Undergraduates

Abstract

Research Problem: *Library utilisation among university students has been reported to be significantly low, and previous research has focused primarily on extrinsic factors, with little or no focus on intrinsic student-related factors such as self-regulation, information-seeking behaviour, and study habits. This study investigates the influence of these factors on library utilisation among undergraduates at a Nigerian public university.*
Methods/theory: *Employing a survey research design and underpinned by the Expectancy-Value theory, a sample of 278 undergraduates was selected through stratified random sampling from six Departments within the Faculty of Education at Federal University Oye-Ekiti, Ekiti State, Nigeria. Data were collected using structured questionnaires and analyzed via descriptive and inferential statistics.*
Results: *Findings reveal that study habit is a predictor of library use ($\beta = .394$, $p<0.05$), while self-regulation ($\beta = -.066$, $p>0.05$) and information-seeking behaviour ($\beta = -.071$, $p>0.05$) are not significant predictors. There is a weak significant relationship between self-regulation and library use ($r =.122$, $p<0.05$), a strong relationship between study habit and library utilisation ($r =0.392$, $p<0.05$), while information-seeking behaviour has no relation with library utilisation ($r =0.32$, $p>0.05$). Combining the three variables together accounted for 15.1% variance in library utilisation.*
Conclusion: *Study habit is the strongest predictor of library use among undergraduates. However, self-regulation and information-seeking*

behaviour, though positively correlated, had no predictive power on library use among undergraduates.
Key Contribution to Knowledge: *Anecdotal evidence indicates a startling underutilisation of library resources among undergraduates in Nigerian universities. Previous research in this regard has focused primarily on extrinsic factors affecting students' use of libraries, with little or no focus on intrinsic student-related factors such as self-regulation, information-seeking behavior, and study habits. An important gap that this current research has filled.*
Recommendation: *It is recommended that institutional strategies and interventions be put in place to ensure proper study habits, self-regulatory skills, as well as greater access to digital library services to enhance academic performance.*

Section 1: Introduction

In an era where global difficulties and educational gaps are becoming visible, meeting United Nations Sustainable Development Goals (SDGs) has become vital. Quality education focuses on reducing inequalities (SDG 10), developing resilient infrastructure (SDG 9), and delivering quality learning experiences, where the library is a key player (SDG 4) (Aregbesola et al., 2024; Dhar et al., 2023; Lahyani et al., 2024). Libraries have reimagined their roles as lively hubs of social progress, moving beyond their historic role as passive book depositories to become engines of technological innovation, social cohesion, and intellectual liberation. The public library (which is the case of this study) is a hub and conduit for information, a tool for encouraging social responsibility, and a communal spaces that provide free access to knowledge and information for sustainable development (Aregbesola et al., 2024). According to Olaoye et al. (2021), the roles of libraries have changed from that of a custodian of information to that of providing advanced technical services, including SDG-related services. Libraries are absolutely crucial for the advancement of literacy, enlightenment, and access to information, providing necessary resources and making a huge contribution to economic and social transformation by providing support for the actualization of impact-based research and the production of knowledgeable graduates (Mojapelo & Modiba, 2021; Omona, 2020). Libraries play a key role in economic mobility, scientific progress, and the emergence of a well-educated citizenship (Ajani et al., 2025; Bouaamri, 2024) by helping to ensure that literacy gaps are bridged, lifelong learning is facilitated, and access to information is democratized. It equally contributes to the promotion of university students' academic performance (Bhalerao, 2024; Fitzgerald et al., 2025; Rabelo et al., 2024).

Academic libraries are important and make huge contributions to academic success but are underutilized in some universities (Bassey et al., 2025; Dauda & Gidado, 2024; Ekikeme et al., 2021). This underutilization is attributed to a complex set of structural, cultural, and institutional forces. Ejikeme et al.'s (2021) findings on the portal services in the university libraries revealed that the utilisation rate was low; therefore, there is a need for more access and awareness. According to Mohammed et al. (2024), the situation was marginal use and absolute non-use of digital library resources and services. Studies have shown that library utilisation and knowledge of the library still remain a serious challenge in Nigerian universities (Okoroma, 2018; Adejo, 2020). The reported current low utilisation of the library services and facilities calls for

investigations into factors contributing to this trend.

Babalola et al. (2023) attributed the non-utilisation to lack of resources, inadequate reading space, limited reading time, and non-digitisation of the libraries. Outdated library resources, poor reading culture among students, poor power supply, and inadequate ICT facilities were also identified by different authors (Adejo, 2020). Faga and Ihuman (2024) found that even students who are aware of electronic information resources in the library do not fully utilize their institutional libraries for their academic work. This has been linked to students' self-regulation.

Self-regulation plays an important role in determining the dynamics of students' learning and outcomes, including the effective use of library resources, especially in higher education settings (Fredrik, 2024; Simón-Grábalos et al., 2025). Self-regulation is the ability of learners to plan, monitor, and evaluate their own learning processes, including goal setting, time management, strategy selection, and self-motivation (Ateş Akdeniz, 2022; Aydan & Capa-Aydin, 2025; Brenner, 2022). Students who are more self-regulated tend to use the library facilities (physical and electronic) more strategically (Anderson & Vega García, 2020; Yot-Domínguez & Marcelo, 2017). For instance, a study in Southwest Nigeria found that undergraduates of a Law faculty with higher self-regulation were far more likely to utilize electronic information resources (Alabi, 2025). Thus, self-regulation (including dimensions like self-efficacy and metacognitive control) results in greater awareness, confidence, intentional use of library resources, and information-seeking behaviour.

Information seeking behaviour (ISB) is the intentional way people identify their information needs, search for information from sources, evaluate its relevance, select what to use, and apply it to satisfy their goals, which could be academic, professional, or personal (Charoenkul & Chanchalor, 2021). ISB is a complex process influenced by user characteristics (e. g., discipline, skills, motivation), context (e.g., academic environment, digital or physical library), available resources, and organisational factors (Kumari & Sharma, 2021). ISB plays a huge part in how much and how library resources are used in academic libraries. Studies indicate that there is a positive relationship between the frequency and depth of library use and students' familiarity with library services, awareness of types of resources (print, digital, electronic databases), and confidence in information retrieval skills (Alabi, 2025; Olutoyosi & Abodunrin, 2019; Oseghale & Ilesanmi, 2016; Oyewo & Alayande, 2023).

In similar way, effective study habits and good use of the library are closely connected since solid study habits generally lead to a more frequent and more purposeful use of library resources, and well-run libraries on their part help in the development and continuation of positive study practices (Michael et al., 2014). It has been found that when students have access to libraries that are well-equipped, easy to reach and comfortable, with up-to-date resources, quiet areas for studying and helpful staff, their study habits become more positive (Bankole et al., 2024; Monu et al., 2020). Having access to and making use of library facilities helps to strengthen positive habits such as effective study techniques, the allocation of study time in a structured manner, note-taking, and engaging more deeply with the material rather than just reading passively (Tinabo & Bakiri, 2025). Basically, effective study habits and library use reinforce each other, libraries providing the conditions needed for disciplined and efficient studying while disciplined studying in turn makes the use of the library more productive (Adefokun & MBashir, 2017).

Few past studies (Eijkeme et al., 2021; Mohammed et al., 2024; Okoroma, 2018) on library utilization have neglected the integrated analysis of intrinsic student-related factors such as self-regulation, information-seeking behaviour, and study habits. Thus, while scholars (Eijkeme et al., 2021; Mohammed et al., 2024; Okoroma, 2018) have examined library utilisation in Nigerian universities, there seems to be no study that has systematically analysed the interactions between self-regulation, information-seeking behaviour, and study habits in relation to library use. Hence, the present study aimed to examine how intrinsic factors, including self-regulation, information-seeking behaviour, and study habits, can predict library usage among undergraduates in Nigerian universities. The specific objectives of the study were to examine the pattern of relationship between self-regulation, information-seeking behaviour, study habits, and library utilisation; to determine the joint effect of these variables on library utilisation; and to determine the linear contribution of each independent variable to the prediction of library utilization. The study, therefore, intends to provide answers to the following research questions:

What pattern of relationship exists between the predictor variables (self-regulation, information-seeking behavior, study habits) and library utilisation among undergraduate students?

What is the joint effect of self-regulation, information-seeking behaviour, and study habits on library utilisation among undergraduate students?

What is the linear contribution of each independent variable (self-regulation, information-seeking behavior, and study habits) to the prediction of library utilisation among undergraduate students?

Section 2: Literature Review

Library utilisation can be described as the manner in which individuals use the physical and digital resources of the library (Wahid et al., 2023). Many studies indicate that there is an increasing reliance on electronic library material (Francis, 2023), as compared with the conventional use of library resources. On the other hand, research on faculty members' perceptions shows that there are differences according to discipline; those in the arts and humanities still place a high value on books (both print and digital), while those in the sciences tend to give priority to databases and e-journals (Scoulas & De Groote, 2024). It has been stated that library use has a determining effect on ways of accessing the library (Prandi et al., 2023), as well as on awareness and accessibility factors (Agboola et al., 2024, and on the spatial design of the interior of the library and the correct arrangement of the different areas within the library (Shoaib, Shamer, & Iqbal, 2025). Self-regulation refers to an individual's capacity to regulate himself or herself (Sari et al., 2020). It is also described as the ongoing process through which an individual deals with the conflicting demands made on their time and energy as they work to achieve desired outcomes and to avoid or prevent undesirable ones (Neal et al., 2017). Wijaya (2024) states that self-regulation encourages autonomous reading and enjoyable learning. It also enables students to manage their learning environments, resources, and strategies, resulting in better learning outcomes, especially in making students become effective and strategic readers (Wijaya, 2021). Recent studies show the extent to which self-regulation among students affects the learning environments, behaviour, and outcomes (ElSayad, 2024; Pandey et al., 2018; Robson et al., 2020; Torrington et al., 2024; Xu et. al., 2022).

Libraries play a vital role in facilitating access to information, improving academic

achievement, and supporting students' research (Rabelo et al., 2024). Yet, despite the fact that libraries have well-defined responsibilities, there has been a remarkable underuse of their resources by undergraduates in Nigerian universities (Okwu et al., 2025). Most of the studies carried out so far have concentrated mainly on extrinsic factors that affect library use, with little attention given to intrinsic factors that relate to the students themselves. Indeed, the relationships between self-regulation, information-seeking behaviour, and study habits with regard to library use have been poorly examined in the existing literature.

Self-regulation facilitates students' control and ability to utilize better learning resources, planning, and time management to enhance learning achievement (Wijaya, 2021). The use of contemporary technology in higher education especially demands the need for self-regulation (Junaštíková, 2024). Research shows that self-regulation also decreases students' tendencies towards procrastination (Liu, 2023) and a connection between self-regulation and resilience of undergraduates (Smart et al., 2025) and a significant relationship between self-regulated learning and academic buoyancy (Rameli et al., 2025). SRL positively predicts study time and selection of specialized materials, metrics that align with library use (Tinajero et al., 2024). Students who have strong self-regulated learning (SRL) skills use both physical and digital library resources in a strategic manner, while those with weaker SRL skills resort to opportunistic and superficial strategies (Chen, 2022; Viberg, Khalil & Baars, 2020). Furthermore, empirical studies have shown that SRL abilities such as setting goals, monitoring progress, and planning or time management are associated with a greater utilisation of library services (Çakiroğlu et al., 2024; Tinajero et al., 2024).

Musa and Mohammed (2024) hinted that information is a crucial element of human activity and that the library is its home. Users engage in information-seeking activity when they use library services to access desired information (Kumari & Sharma, 2021). Information-seeking behavior is one of the key concepts of library and information sciences, which entails the searching and fetching of information by a person to meet such person's information needs (Parveaz & Khan, 2022). The awareness and availability of library resources, especially electronic resources, are crucial in library utilization (Patel & Anand, 2020). It is expected that there should be a strong relationship between information-seeking behaviour and library utilization, as David-West and Bassey (2023) assert that information-seeking behaviour is the catalyst for library resource utilization and students' habits toward studying. In large institutional and domain-specific studies, proactive information seekers engage more deeply with the library, having longer sessions and repeatedly returning for tasks (Kumari & Sharma, 2021).

Study habits, as defined by Thomson et al. (2025) are the planned, intended study practices, sequence of practices during the process of memorization, systematization, regulation, and retention of new facts and concepts in the content of learning, having assumed the form of persistent effort on the part of the students, for learning academic courses and qualifying examinations. Lone (2021) believes that student access to and use of libraries do improve their study habits. Similarly, disciplined study habits such as regular study sessions, planned revision, note-taking, and active recall are positively correlated with library engagement. Surveys consistently find that students with stable study routines are more likely to use library resources for scheduled study (quiet study spaces, reserve texts), use bibliographic databases for assignments, and attend library instruction (Monu et al., 2020). Stronger study habits have been found to be associated with

more systematic library use (Pagalilauan et al., 2023). A study has also revealed that information-seeking behaviour, study habits, and SRL cluster into an "academic self-management" factor, which predicts students' library use (She et al., 2023).

Miraj et al. (2021) indicate that information seeking positively and significantly contributes to academic performance, while Onwubiko's (2022) study indicated the presence of a statistically significant relationship between self-efficacy and academic performance, which invariably impacts students' study habits. While Alabi (2025) examines computer self-efficacy and electronic information resources utilisation among law undergraduates, and Monu et al. (2020) examine library use and study habits, these studies do not provide an integrated analysis of how self-regulation, information seeking behaviour, and study habits jointly predict library utilisation. Despite extensive literature on library utilisation and its determinants, there is limited empirical research that systematically examines the interactions between self-regulation, information seeking behaviour, and study habits in relation to library use among undergraduates in Nigerian public universities. Existing studies often focus on single factors or extrinsic barriers, without providing an integrated analysis. This study fills that gap by examining how intrinsic factors, including self-regulation, information-seeking behaviour, and study habits, can predict library usage among undergraduates in Nigerian universities

Section 3: Materials and Methods

Research Design

The quantitative research design of the survey research type was adopted in this study. It involves collecting and analysing numerical data to identify patterns, describe characteristics, make predictions, and test causal associations as well as generalise results to wider populations (Fischer et al., 2023). The research type was employed because the researcher had no direct control of the dependent and the independent variables, as they had already occurred.

Population and Sample

The target population for this study comprised undergraduate students at the Federal University Oye-Ekiti, in Ekiti State, Nigeria. The multi-stage sampling procedure was adopted in selecting the sample for the study. First, purposive sampling was used in selecting a public federal university from the Southwest region of Nigeria; the reason was due to access and familiarity with the context that aligns with the research objectives. Second, the Faculty of Education was purposively selected for this study. This decision was guided by ethical considerations and the relative ease of gaining access to respondents. Third, 300 undergraduates were chosen as respondents through a stratified random sampling technique. The procedure was designed to ensure adequate representation of students from various departments in the faculty and levels of study in the sample, allowing for more generalizable results. A total of 278 data were retrieved, giving an attrition rate of 7.4%, as a few of the questionnaires were returned incompletely filled out.

Measures

Library utilization was measured using 11 adapted items from the Use of Library Resources Questionnaire developed by Eyiolorunshe and Eluwole (2017). The instrument required respondents to indicate the frequency of their library visits and extent of resource use across the items. Responses were recorded on a five-point Likert scale ranging from "daily," "2-3 times weekly", "once weekly," "occasionally," to "never." The higher the aggregate scores, the greater the level of usage of the library and vice versa.

The scale showed acceptable internal consistency with a Cronbach alpha coefficient of .73 obtained in the pilot study. This suggests that the scale demonstrated acceptable internal consistency.

Self-regulation was measured by the Self-Regulation Questionnaire (SEQ) developed by Brown et al. in 1999. The scale originally has 63 items with the subscales logically assigned. It was 5 Likert scale scoring format with Strongly agreed (5), Agree (4), Uncertain (3), Disagree (2), and Strongly disagree (1) with the items that are reversely scored 1=5, 2=4, 3=3. 4=2, and 5=1. The authors gave a high test-retest score of r = .94 and a high score of internal consistency (α = .91). The reliability for this study was α=.87. Information-seeking Behaviour was measured by 10 items which were self-developed by the researchers, along with insights from the literature (Stokes et al., 2021; Zhang et al., 2023). These items were placed on a five-point Likert response format ranging from almost always, often, sometimes, seldom, rarely. For this study, a Cronbach's alpha of .85 was obtained.

Table 1: Data Sources

Study habit was measured by the Student Reading Interest and Study Habit Questionnaire (SRISHQ) developed by Paul Molyneux and Pam Macintyre (2017). Twenty (20) items were adapted, as they were deemed appropriate after the pilot study for the context. The respondents were asked to tick how often they read, viewed, or used the listed items with a four-point Likert response format: almost every day, about once a week, about once a month, never or hardly ever. Cronbach's alpha reliability was found to be 0.74.

Data Analysis Procedure

The collected data were analyzed using descriptive and inferential statistics. Descriptive statistics, including percentage and frequency counts, were used to provide an overview of demographics and variables of the study. Inferential statistics, including Pearson product-moment correlation and multiple regression analysis, were employed to determine the predictive relationships between undergraduates' self-regulation, information-seeking behavior, study habits, and library utilization.

Source Type	Examples	Number of Sources	Contribution to Analysis
Survey questionnaires	Undergraduate students from six departments in the Faculty of Education at Federal University Oye Ekiti	278	Quantitative data on library utilisation, self regulation, information seeking behaviour, and study habits
Institutional documents	Faculty of Education enrolment registers	2	Provided sampling frame and demographic context

Section 4: Theoretical Framework

This study is underpinned by the Expectancy-Value theory, which was formulated by Atkinson in 1964 and was further developed and used by Jacquelynne Eccles and most recently by Wigfield (Atkinson, 1964 & Wigfield, 2002; Wigfield &

Eccles, 2000). Expectancy refers to the degree of success individuals perceive they can achieve from a certain task, while Value deals with the importance they attach to the outcome of that given task (Shang et al., 2023). The theory states that the likelihood of engaging in an activity increases if one expects to succeed at that activity and if one values the activity itself. The theory also takes into account four components of task value: attainment value (value of success), intrinsic value (personal happiness), utility value (perceived relevance of the task to future goals), and cost (competition with other goals) (Choi et al., 2010; Shang et al., 2023).

The expectancy-value model maintains that a confluence of factors mediates task value and expectations for success. This includes characteristics (skills, past experiences, goals, self-perceptions, beliefs, expectations, interpretations) and environmental factors (cultural background, attitudes and behaviors of socializers) (Eccles et al., 2024; Umarji et al., 2021). Expectations for success and valued tasks are related. By implication, expectations for success tend to determine task value (Choi et al., 2010). For example, someone who believes in performing well in a particular subject may receive a higher score in such a subject than those who do not have such anticipation of doing well (Eccles et al., 2024; Shang et al., 2023). Task values are more firmly tied to achievement-related choices. In summary, expectancy-value theory underlines the joint importance of competence-related beliefs (expectations for success) and values in explaining motivation (Choi et al., 2010; Eccles et al., 2024). This theory is applicable to this study as it illustrates the relationship between motivation and behaviour, indicating how the belief in success and value will influence self-regulation, information-seeking behaviour, studying, and the use of the library. Students can only use the library when they have expectancy for success, which impacts their self-regulation and drives their information-seeking behaviours and eventual library use.

While Expectancy Value Theory has been widely used to explain achievement motivation in educational settings, this study applies it to the specific context of library utilisation among undergraduates in a Nigerian public university. It demonstrates how students' expectations for success and the value they attach to library resources influence their self-regulation, information-seeking behaviour, study habits, and ultimately their library use. This application extends the theory to a specific academic behaviour (library utilisation) in a non-Western context. The theory can be criticised for focusing on individual motivation and neglecting structural barriers to library use (e.g., inadequate resources, poor power supply). The study addresses this by acknowledging these extrinsic factors in the literature review and discussing their potential impact on the findings. This study contributes to Expectancy Value Theory by demonstrating its applicability to library utilisation behaviour and by showing how expectancy and value beliefs interact with study habits to predict library use. It also extends the theory by analysing how self-regulation and information-seeking behaviour mediate the relationship between motivation and library utilisation

Section 5: Results and Presentation of Data

Table 2 shows the respondents' socio-demographic characteristics. It shows that 92 respondents are males, which represent 33.1% of the entire sample, while females are 186, representing 66.9% of the total respondents. The table further revealed the frequency distribution of the respondents' ages. It shows that the respondents between the age ranges of 16-20 years are 158 in number, representing 56.8%. Those between the age ranges of 21-25

years are 101, representing 36.3%, while the respondents within 26 years and above are 19 in number, which represents 6.9% of the entire sample. Table 1 further shows the frequency distribution of the respondents' place of residence. It revealed that 36 respondents live on campus, which represented 12.9%; those who live outside the campus are 231, representing 83.1%, while the remaining 11, which represented 4.0% of the respondents, lived with parents and guardians. This showed that the majority of the respondents live off campus.

Table 2: Socio-demographic characteristics of respondents

Characteristics	Frequency	Percentage (%)
Gender		
Male	92	33.1
Female	186	66.9
Age (years)		
16-20 years	158	56.8
21-25 years	101	36.3
26 years and above	19	6.9
Residence		
On campus	36	
12.9		
Off campus	231	83.1
Parent/guardian	11	
4.0		
	278	100

Research Question One: What pattern of relationship exists between the predictor variables (self-regulation, information seeking behavior, study habit) and library utilisation among university undergraduates?

Table 3 shows the pattern of relationship among the predictor variables. It reveals that there is a significant relationship between self-regulation and library utilisation ($r = 122$, $p<0.05$); there is no significant relationship between information seeking behaviour and library utilisation ($r = 0.32$, $p>0.05$), while there exists a significant relationship between study habit and library utilisation ($r= 0.392$, $p<0.05$). This implies that there is a significant relationship between self-regulation and library utilisation, as well as study habit and library utilisation, while there is no significant relationship between information seeking behaviour and library utilisation.

Table 3: Multiple correlation summary of self-regulation, information seeking behaviour, study habits and library utilisation among university undergraduates

Variable	**Mean**	**SD**	1	2	3	4
Self-regulation	39.12	10.678	1.00			
Information seeking behaviour	32.88	10.938	.284*	1.00		
Study habit	48.79	7.834	.195*	.215*	1.00	
Library utilisation	34.40	8.000	.122*	.032	.392*	1.00

Source: Authors' own work

Research Question Two: What is the joint contribution of self-regulation, information seeking behavior and study habit on library utilisation among university undergraduates?

Table 4 shows that self-regulation, information-seeking behaviour, and study habit jointly contribute to predicting library utilisation. Regression coefficient R=0.400, R2=0.160, Adj R2=0.151. Together, the three factors account for 15.1% of the variance in library utilisation among undergraduate students. However, the remaining percentage (84.9%) accounts for the change in library utilisation among undergraduate students that is beyond the study. Therefore, self-regulation, information-seeking behaviour, and study habit jointly predicted library utilisation among undergraduate students.

Table 4: Regression summary showing the joint contribution of the independent variables on the dependent variable

R=0.400		**Adj R2=0.151**			
R2=0.160		**Std Error=7.372**			
Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	2837.020	3	945.673	17.402	.000
Residual	14889.858	274	54.343		
Total	17726.878	277			

Source: Authors' own work

Research Question Three: What is the linear contribution of each independent variable (self-regulation, information seeking behavior and study habit) to the prediction of library utilisation among university undergraduates?

Table 5 reveals that one out of the three factors, study habit (β= -.066, t=-1.129, p>0.05) and information seeking behaviour (β= -.071, t=-1.217, p>0.05) are not significant predictors of library utilisation among undergraduates while study habit (β=.394, t=6.878, p<0.05) is a significant predictor. The only potent predictor is students' study habit. This implies that students' study habit will increase library utilisation among undergraduates by 39.4%.

Table 5: Regression summary showing the relative contribution of the independent variables on the dependent variable

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	Sig.
(Constant)	57.679	3.800		15.180	.000
Self-regulation	-.049	.044	-.066	-1.129	.260
Information seeking-behaviour	-.052	.043	-.071	-1.217	.225
Study habit	-.536	.058	.394	6.878	.000

Source: Authors' own work

Section 6: Discussion of Findings

This study examined the combined and comparative influences of self-regulation, information seeking behavior, and study habit on the prediction of library utilisation among undergraduates in a Nigerian public university. The study also examined the pattern of correlation between the predictor and the criterion. According to the results obtained in the study, a weak but significant positive relationship exists between self-regulation and library utilization, but it is not a significant predictor of library utilisation. Self-regulation helps students to better plan their learning process, which is absolutely vital for academic performance. But this does not affect students' library use. By using online tools like databases and virtual libraries, students who can effectively manage their time on their own can lower their need for physical libraries. Highly self-regulated students can make use of other resources outside the actual library, like virtual libraries and internet databases, which lower their need for physical libraries. This finding is in line with previous research where the ability of self-regulated learners to be able to learn in different ways was found to be independent of how often they visit the library (Kaiser et al., 2025). In addition, this research corroborates that of Misa et al. (2022) and Pandey et al. (2018), who found an association between self-regulation and study habits.

However, the direct effect of self-regulation on some academic behaviors like library utilization was not determined. The results further revealed that study habits are significantly correlated with library utilisation, with study habits being a significant predictor of library utilisation when regressed. These findings are possibly due to the likelihood that proper study habits are going to encourage one to utilize the learning facilities that are at their disposal, for instance, libraries. Students who have timetabled study times are likely going to utilize library services in pursuit of their learning. The literature supports the claim that there is a correlation between learning practices and library visits (Jato et al., 2014; Monu et al., 2020; Pagalilauan et al., 2023).

This study has revealed that there is no significant relationship between information seeking behaviour and library utilisation, and it is also a non-significant predictor in the regression analysis. The results of the study could be because effective study habits often mobilise an individual to utilise available academic resources, including libraries. Students with structured study routines are more likely to engage with library services to enhance their learning. The non-significant finding of information-seeking behaviour can be accounted for by the proliferation of digital resources that may have affected individuals' information-seeking behaviour. It is preferred by students since they search using search engines on the net as opposed to visiting actual libraries. Such a new phenomenon may account for the non-significant relationship

between conventional information-seeking behaviors and library visits. It has been established by scholars that undergraduates prefer making use of net-based sources since they are easy and convenient, and this can reduce the need for access to physical library sources (Komissarov & Murray, 2016). This study is misaligned with the study of David-West & Bassey (2023), who established that information-seeking behaviour influences library resources utilization among university undergraduates.

The findings of the study further reveal that study habits are the strongest predictors of library usage by undergraduate students. While these variables account for library use, significant amounts of variance remain unexplained, pointing toward other variables such as the availability of online resources, library access, and choice. As more resources become available in terms of the provision of information on the internet, students are in a position where they can gather information without actually going to the library, possibly undermining the effect of traditional predictors on library use. The increasing availability of online resources has significantly affected students' information-seeking behaviors as well as library use rates. This finding affirms those of past studies that found the use of online library resources to be directly related to students' academic achievement and retention (LeMaistre et al., 2018, Scoulas & De Groote, 2021).

The finding that study habit is the strongest predictor of library utilisation supports Expectancy Value Theory, which asserts that individuals are more willing to engage in an activity when they anticipate success and hold the activity in high regard. Students with strong study habits have high utility value for the library as a resource for academic success, which drives their library use.

Implications of Findings

The implications of this study for library practitioners and educational stakeholders are far-reaching, especially in the case of Nigerian higher education. Perhaps the most useful finding is the indication that study habit proved the strongest predictor of library use among undergraduates. It means that students who are systematic in their study habits are likely to take advantage of the use of libraries, thereby enhancing their academic productivity. Efforts at improving students' academic performance must address optimization of their study habits. This implies that students in universities are moving towards other sources of learning such as digital websites, online databases, as well as learning software at their own pace, lessening the conventional reliance on the library. This should challenge university libraries to improve in digital inclinations for modern learners.

Information seeking behaviour did not significantly correlate with or predict library utilisation, showing some differences between information searching activity on the students' end and formal use of library services. It may be an indicator of growing reliance on easily accessible web resources rather than systematic academic databases. Thus, libraries must rethink how they market their collections and institutions must teach students' information literacy so that students can effectively use academic resources as well as critically evaluate them. Collectively, these findings affirm the importance of the determinants of library use at the behavioral level. Granting access is not enough; students must be taught, encouraged, and habituated to the habits of mind and the skills that lead towards active use of library resources.

Section 7: Conclusion and Recommendations

Study habit has emerged in this study as the strongest predictor of library use among undergraduates. Self-regulation and information-seeking behaviour, though positively correlated, had no predictive power. This warrants the importance of inculcating good learning habits among students in enabling active use of libraries. In this fast-paced digitalization, age-old habits like study habits still play important roles in the use of libraries and library resources. To enable greater library use, institutions must undertake three-fold behavioral, technical, and infrastructural enhancements. Future studies should investigate other individualistic as well as contextual variables such as digital competency, access fairness, as well as social influence in an attempt to construct an elaborate picture of library participatory dynamics in higher learning.

On the basis of the findings, certain recommendations are made for encouraging library use among university undergraduates. Firstly, there is a need to strengthen students' study habits, as it emerged as the strongest predictor of library use. Interventions in institutions need to be in place to support students in achieving successful learning habits, like goal-setting, time management, and formal reading workshops. These can help students in achieving habits that naturally lead towards greater usage of libraries. Second, incorporating library use as an integral part of coursework is necessary. Course coordinators and lecturers should create assignments in such a fashion that forces students to access virtual as well as physical library resources so that library use becomes integral to learning. Third, as the use of digital information becomes increasingly significant, university libraries must place major emphasis on digital access as well as on digital literacy. This means constructing their electronic collections, establishing remote access systems, and offering frequent digital literacy classes for teaching students how to search for, assess, and use academic information.

In addition, while self-regulation did not directly predict library usage, it is still an important academic variable. As such, institutions should introduce self-regulated learning modules as components of general studies or orientation programs so that students can become independent learners who are disciplined in their learning activities. Enhancing self-regulation through training in study skills, goal-setting, time management, and digital literacy can therefore increase library usage, which in turn supports better academic outcomes. Finally, there is a need for active promotion of library resources through promotional efforts. Such efforts can be done through social media, newsletters, and interactive activities on the campus promoting library services and how they can contribute towards academic success.

Key Contribution to Knowledge

This is the first study to examine the interactions between self-regulation, information-seeking behaviour, and study habits in relation to library use among undergraduates in a Nigerian public university; the finding that study habits are the most potent predictor of library utilisation, while self-regulation and information-seeking behaviour are not significant predictors

Study's Limitations and Future Research

However, there are some limitations to this. The study was done in one particular university; hence, its findings are not generalizable. Additional research can incorporate more than one institution to get a wider perspective. It is difficult to determine the dynamics of the variables involved due to the cross-sectional nature of the study. This

can be made possible through longitudinal research studies that may give more insights into how the trends of library usage evolve. There are other possible variables such as technological accessibility of students, peer influence, and socio-economic status of the students that were not considered in this study. These variables could have given additional information to support the focus and coverage of the study. Future studies should include multiple institutions, use longitudinal designs, and investigate other variables such as technological accessibility, peer influence, and socioeconomic status.

References

Adefokun, D. S. I., & MBashir, D. L. (2017). Effectiveness of Counselling for Study Skills and Utilization of Academic Library Resources for Academic Success Among Students of Federal University Lokoja, Kogi State, Nigeria. American Scientific Research Journal for Engineering, Technology, and Sciences, 34(1), 62-72. https://asrjetsjournal.org/American_Scientific_Journal/article/view/2823.

Adejo, A. A. (2020). Factors mitigating the utilization of information resources and services in the Nigeria French Language Village Library, Badagry. International Journal of Library and Information Science, 12(2), 56–63. https://doi.org/10.5897/IJLIS2020.0968.

Agboola, S. O., Saadu, Y. O., Abdulrasheed, I., Shehu, I. O., & Olaide, M. A. (2024). Awareness and accessibility as determinants of utilisation of OPAC by students in polytechnic libraries in Kwara State, Nigeria. MiddleBelt Journal of Library and Information Science, 22(1), 112-127.

Ajani, Y. A., Akin-Fakorede, O. O., Ama-Abasi, R. D., Onanuga, A. O., Amaechi, N. M., Ayegun, I. B., Baba, G. A., Oladokun, B. D., & Abubakar, S. (2025). Knowledge democratization and accessibility in the Fifth Industrial Revolution: A qualitative study of sustainability in Nigerian public libraries. IFLA Journal, 0(0). https://doi.org/10.1177/03400352251385056

Alabi , R. (2025). Computer self-efficacy as correlates of electronic information resources utilization among law undergraduates in South-West, Nigeria. Communicate: Journal of Library and Information Science, 26(2), 292–301. https://www.cjolis.org/index.php/cjolis/article/view/132

Anderson, L., & Vega García, S. (2020). Library Usage, Instruction, and Student Success across Disciplines: A Multilevel Model Approach. College & Research Libraries, 81(3), 459. doi:https://doi.org/10.5860/crl.81.3.459

Aregbesola, A., Owolabi, S. E., & Adebisi, T. (2024). Going to the Cities: The Strategic Roles of Public Libraries in Promoting Sustainable Development Goals. Public Library Quarterly, 43(3), 367–384. https://doi.org/10.1080/01616846.2023.2253692.

Ateş Akdeniz, A. (2023). Exploring the impact of self-regulated learning intervention on students' strategy use and performance in a design studio course. Int J Technol Des Educ, 33, 1923–1957. https://doi.org/10.1007/s10798-022-09798-3.

Atkinson, J. W. (1964). An introduction to motivation. Van Nostrand.

Aydan, S. & Capa-Aydin, Y. (2025). What makes them self-regulated? Self-regulation procedures of academically successful students and key influences. Acta Psychologica, 257, 105106. https://doi.org/10.1016/j.actpsy.2025.105106.

Babalola, F. E., Fakoyede, S. J., Ojobola, F. B., & Abiona, F. G. (2023). Fostering library usage among science students towards Sustainable Development Goals. The Reference Librarian, 64(1), 51–67. https://doi.org/10.1080/02763877.2023.2170949.

Babalola, F. E., Fakoyede, S. J., Ojobola, F. B., Ekundayo, S. K., Famuwagun, S. T., & Alabi, D. O. (2024). Teacher's Perspectives on Library Practice in Nigeria Secondary Schools Through the Lens of Science Literacy: The International Information & Library Review: Vol 0, No 0. https://www.tandfonline.com/doi/abs/10.1080/10572317.2024.2352813

Bankole, Q. A., Adelodun, A. F., Sulaiman, K. G., & Saliu, A. (2024). Accessibility, Utilisation and Perceived Usefulness of Library Resources on the Study Habits of Undergraduates in Kwara State Universities. Inkunabula: Journal of Library Science and Islamic Information, 3(2). https://doi.org/10.24239/inkunabula.v3i2.3039.

Bassey, R., Abang, A. E., Odey A. A. & James, L. D. (2025). Awareness and Utilization of E-Resources in the University of Calabar Library. Global Journal of Pure and Applied Sciences, 31, 343-353. DOI: https://dx.doi.org/10.4314/gjpas.v31i2.20.

Bhalerao, S. (2024). Academic Librarianship is a Catalyst for Holistic Development of Students. https://www.ijsr.net/archive/v13i3/SR24304160551.pdf.

Brenner, C.A. (2022). Self-regulated learning, self-determination theory and teacher candidates' development of competency-based teaching practices. Smart Learn. Environ., 9, 3. https://doi.org/10.1186/s40561-021-00184-5.

Bouaamri, A. (2024). The roles of public libraries in enhancing educational systems and social inclusion in Africa. Prospects, 54, 467–473. https://doi.org/10.1007/s11125-023-09670-9.

Çakiroğlu, Ü., Kokoç, M. & Atabay, M. (2024). Online learners' self-regulated learning skills regarding LMS interactions: a profiling study. J Comput High Educ. 36, 220–241. https://doi.org/10.1007/s12528-024-09397-2.

Charoenkul, S. & Chanchalor, S. (2021). Informational seeking behavior and personality traits in secondary school students. International Journal of Instruction, 14 (2), 405-420. https://files.eric.ed.gov/fulltext/EJ1290958.pdf.

Chen J. (2022). The effectiveness of self-regulated learning (SRL) interventions on L2 learning achievement, strategy employment and self-efficacy: A meta-analytic study. Frontiers in psychology, 13, 1021101. https://doi.org/10.3389/fpsyg.2022.1021101.

Choi, J., Fiszdon, J.M., & Medalia, A. (2010). Expectancy-value theory in persistence of learning effects in schizophrenia: role of task value and perceived competency. Schizophr Bull., 36(5):957-65. doi: 10.1093/schbul/sbq078.

Dabengwa, I. M. (2025). Are Academic Libraries Doing Enough to Support the Sustainable Development Goals (SDGs)? A Mixed-Methods Review . Evidence Based Library and Information Practice, 20(1), 148–184. https://doi.org/10.18438/eblip30551.

Dauda, R. B., & Gidado, S. D. (2024). Utilization of Library Resources Among Undergraduate Business Education Students at Al-Hikmah University, Ilorin, Nigeria. International Journal of Universal

Education, 2(1), 35–39. https://doi.org/10.33084/ijue.v2i1.7512.

David-West, B. T., & Bassey, M. M. (2023). Information Seeking Behaviour: A Catalyst for Library Resources Utilization by Undergraduate's in University of Calabar. Communicate: Journal of Library and Information Science, 25(2), Article 2.

Dhar, T., Dhar, T. S., Singh, H., Bishnoi, A., & Singh, A. (2023). Alignment of India's National Education Policy 2020 with the United Nations' Sustainable Development Goals: A Path towards Quality Education for All. World Journal of Advanced Research and Reviews, 19(3), 049–054. https://doi.org/10.30574/wjarr.2023.19.3.1768.

Eccles, J. S., & Wigfield, A. (2002). Motivational Beliefs, Values, and Goals. Annual Review of Psychology, 53(1), 109–132. https://doi.org/10.1146/annurev.psych.53.100901.135153.

Eccles, J.S., & Wigfield, A. (2024). The Development, Testing, and Refinement of Eccles, Wigfield, and Colleagues' Situated Expectancy-Value Model of Achievement Performance and Choice. Educ Psychol Rev, 36, 51. https://doi.org/10.1007/s10648-024-09888-9.

Ejikeme, A. N., Obayi, Uche. F., & Ukamaka, E. J. (2021). Availability and Utilization of Library Portal Services for Research in University Libraries in Nigeria. International Journal of Knowledge Content Development & Technology, 11 (1), 49-64. http://koreascience.or.kr/article/JAKO202109252118623.pdf.

ElSayad, G. (2024). Drivers of undergraduate students' learning perceptions in the blended learning environment: The mediation role of metacognitive self-regulation. Educ Inf Technol, 29, 15737–15760. https://doi.org/10.1007/s10639-024-12466-9

Faga, A., & Ihuman, R. Y. (2024). Awareness and Use of Electronic Information Resources By Undergraduates in Public University Libraries in Nigeria. The Catalyst Journal of Library and Information Literacy, 3(1), 56–68.

Francis, F. (2023). Usage of e-resources in academic libraries. Journal of Online Engineering Education, 14(2), 13-26.

Fredrik, N. (2024). "You're not learning skills—you're just realizing what you can do": a preliminary study of self-regulation in higher education. Frontiers in Education, 9. DOI=10.3389/feduc.2024.1418297. https://www.frontiersin.org/journals/education/articles/10.3389/feduc.2024.1418297.

Fitzgerald, S. R., Berube, S., Jiang, Z., & Ting, C. (2025). Library Use and Student Success: Focus on First Generation Students. New Review of Academic Librarianship, 31(3), 245–263. https://doi.org/10.1080/13614533.2025.2466519

Janine, M. (2025). An investigation into how library design and signage support children's navigation and wayfinding in international primary school libraries. Reflective Professional, 5. https://doi.org/10.48525/rp-2025-id165.

Jato, M., Ogunniyi, S. O., & Olubiyo, P. O. (2014). Study habits, use of school libraries and students academic performance in selected secondary schools in Ondo West Local Government Area of Ondo State. International Journal of Library and Information Science, 6(4), 57–64. https://doi.org/10.5897/IJLIS2012.0412.

Junaštíková, J. (2024). Self-regulation of learning in the context of modern technology: A review of empirical studies.

Interactive Technology and Smart Education, 21(2), 270–291. https://doi.org/10.1108/ITSE-02-2023-0030.

Kumari, K., & Sharma, S. (2021). Information-seeking behaviour of users of academic libraries: A critical review of literature. Journal of Library & Information Technology, Vol. 41(6), 469-475. https://doi.org/DOI: 10.14429/djlit.41.5.16646.

LeMaistre, T., Shi, Q., & Thanki, S. (2018). Connecting Library Use to Student Success. Portal: Libraries and the Academy, 18(1), 117–140. https://doi.org/10.1353/pla.2018.0006.

Liu, Y. (2023). A Review on the Relationship Between Academic Procrastination, Self-regulation, and Appropriate Remedial Strategies. Lecture Notes in Education Psychology and Public Media, 24(1), 313–319. https://doi.org/10.54254/2753-7048/24/20230795.

Lone, Rr. A. (2021, May 16). Study Habits and Academic Performance among Students: A Systematic Review—Research Review International Journal of Multidisciplinary. https://old.rrjournals.com/past-issue/study-habits-and-academic-performance-among-students-a-systematic-review-2/

Michael, J., Ogunniyi, S. & Olubiyo, P. (2014). Study habits, use of school libraries and students academic performance in selected secondary schools in Ondo West Local Government Area of Ondo State. International Journal of Library and Information Science, 6. 57-64. 10.5897/IJLIS2012.0412.

Miraj, M., Chuntian, L., Mohd Said, R., Osei-Bonsu, R., & Rehman, R. U. (2021). How Information-Seeking Behaviour, Essential Technologies, and Resilience Enhance the Academic Performance of Students. Frontiers in psychology, 12, 651550. https://doi.org/10.3389/fpsyg.2021.651550.

Mohammed, M. F., Abdullahi, I. M., & Tijani, A. (2024). Marginal Use and Absolute Nonuse of Digital Library Resources and Services by Faculty Members in Ahmadu Bello University Zaria, Nigeria. Journal of Nigerian Library Association, 5(1). https://doi.org/DOI : https://doi.org/10.61955/NXFLBZ.

Mojapelo, M. S., & Modiba, M. T. (2021). Expanding Roles and Services of Academic Libraries in Achieving Sustainable Development in South Africa. Mousaion: South African Journal of Information Studies, 39(1), Article 1. https://doi.org/10.25159/2663-659X/7383.

Molyneux, P. & Macintyre, P. (2017). https://www.education.vic.gov.au/Documents/school/teachers/teachingresources/disciplne/English/literacy/litfocuslitreadingsurvey.pdf

Monu, J. O., Bamgbose, A. A., & Okunnu, H. O. (2020). Effective Use of Library and its Impact on Students' Study Habits in Selected Universities in Lagos State, Nigeria. Library and Information Science Digest, 13, 74–84.

Mukhrjee, B. (n.d.). Models of information seeking behavior. In Library Use and User Studies. INFLIBNET. https://ebooks.inflibnet.ac.in/lisp15/chapter/models-of-information-seeking-behavior/

Musa, R. S., & Mohammed, A. (2024). Information Seeking Strategies and Factors Influencing Information Utilisation by Female Librarians in Universities in Kano State, Nigeria. Fugus International Journal of Library and Information Science, 1(1), Article 1. https://doi.org/10.57233/fijlis.v1i1.06.

Neal, A., Ballard, T., & Vancouver, J. B. (2017). Dynamic Self-Regulation and Multiple-Goal Pursuit. Annual Review of Organizational Psychology and Organizational Behavior, 4(1), 401–423. https://doi.org/10.1146/annurev-orgpsych-032516-113156.

Okoroma, F. N. (2018). Use of Social Media for Modern Reference Service Delivery in Academic Libraries In Nigeria. International Journal of Asian Social Science, 8(8), 518–527. https://doi.org/10.18488/journal.1.2018.88.518.527.

Okwu, E., Oyighan, D., & Oladokun, B.D. (2025). Patronage and Use of Library Resources among Gen Z Undergraduates in Nigerian Universities. Journal of Digital Learning and Education, 5 (1), 67-77. DOI: 10.52562/jdle.v5i1.1492.

Olatoye, O., Bokwe, P., & Muchaonyerwa, N. (2021). An Evaluation of the Impact of Libraries towards the Realisation of the Sustainable Development Goals (SDGs). J Hum Ecol, 74(1–3), 61–67.

Olutoyosi, O & Abodunrin, S (2019). Information Needs And Seeking Behaviour As Correlates Of Utilisation Of Information Resources Among Secondary School Students With Special Needs In Ibadan Metropolis, Nigeria. Global Journal of Applied, Management and Social Sciences, 16, 309 – 327,

Omona, W. (2020). The roles of library and information services in achieving Sustainable Development Goals (SDGs) in Uganda.

Onwubiko, E. C. (2022). An Assessment of the Effect of Self-efficacy, Reading Culture, Utilization of Library Habits on the Academic Achievements of Student-librarians. Library Philosophy & Practice(e-journal), 7096. https://digitalcommons.unl.edu/libphilprac/7096

Oseghale, O., & Ilesanmi, T. C. (2016). The effects of library education on information seeking behaviour of first-year students at the University of Ibadan, Nigeria. MiddleBelt Journal of Library and Information Science, 14. https://repository.ui.edu.ng/items/4193d013-93fb-4e5a-aa7d-883510b14e5b.

Oyewo, R. O., & Alayande, G. F. (2023). Organisational Factors, Information Seeking Behaviour and Library Use of Teachers in College Of Education-Based Secondary Schools In Southwest, Nigeria. University of Ibadan Journal of Library and Information Science, 6(2), 127-147. https://journals.ui.edu.ng/index.php/uijlis/article/view/1375/1099.

Pagalilauan, J. B., Buco, J. T., & Daquioag, E. R. (2023). Library Environment Affecting the Study Habits and Academic Performance of Students of SJCB. American Journal of Education and Technology, 2(3), 51–57. https://doi.org/10.54536/ajet.v2i3.1751

Pandey, A., Hale, D., Das, S, Goddings, A., Blakemore S, & Viner, R.M.(2018). Effectiveness of Universal Self-regulation–Based Interventions in Children and Adolescents: A Systematic Review and Meta-analysis. JAMA Pediatr, 172(6):566–575. doi:10.1001/jamapediatrics.2018.0232.

Parveaz, S., & Khan, A. (2022). Understanding Information Seeking Behavior of Users in Academic Context (A Critical Review of Literature). ECS Transactions, 107(1), 9673–9694. https://doi.org/10.1149/10701.9673ecst.

Patel, M., & Anand, M. (2020). Self-Regulation—An overview|ScienceDirect Topics.

https://www.sciencedirect.com/topics/social-sciences/self-regulation.

Prandi, C., Barricelli, B.R., Mirri, S. et al. (2023). Accessible wayfinding and navigation: a systematic mapping study. Univ Access Inf Soc, 22, 185–212. https://doi.org/10.1007/s10209-021-00843-x

Rabelo, C.A., Teixeira, J.G., & Mendes, G.H.S. (2024). Student experience in academic libraries: analysis of intellectual structure and opportunities for future research. The Journal of Academic Librarianship, 50 (3), 102878. https://doi.org/10.1016/j.acalib.2024.102878.

Rameli, M. R. M., Alhassora, N. S. A., Mazlan, A. N., Hoon, T. S., Mohamed, S. R., & Hong, J. B. Z. (2025). Relationship between Self-regulated Learning with Academic Buoyancy: A Case Study among Malaysia FELDA Secondary School Students. Journal of Advanced Research in Applied Sciences and Engineering Technology, 45(1), Article 1. https://doi.org/10.37934/araset.45.1.202214.

Robson, D. A., Allen, M. S., & Howard, S. J. (2020). Self-regulation in childhood as a predictor of future outcomes: A meta-analytic review. Psychological bulletin, 146(4), 324–354. https://doi.org/10.1037/bul0000227.

Sari, A. B. P., Brameswari, C., & Haratikka, H. (2020). Millennial lecturers' attitudes in incorporating the online application in the efl classroom. project (Professional Journal of English Education), 3(3), 337. https://doi.org/10.22460/project.v3i3.p337-347.

Scoulas, J. M., & De Groote, S. L. (2021). University Students' Library Experience and Its Impact on Their GPA During the Pandemic. Journal of Library Administration, 61(7), 813–837. https://doi.org/10.1080/01930826.2021.1972730.

Scoulas, J. M., & De Groote, S. L. (2024). Use and importance of library resources to support faculty research and productivity. College & Research Libraries, 85(5), 669.

Shang, C., Moss, A.C., & Chen, A. (2023). The expectancy-value theory: A meta-analysis of its application in physical education. J Sport Health Sci., 12(1):52-64. doi: 10.1016/j.jshs.2022.01.003.

She, C., Liang, Q., Jiang, W., & Xing, Q. (2023). Learning adaptability facilitates self-regulated learning at school: the chain mediating roles of academic motivation and self-management. Frontiers in Psychology, 14, 1162072.

Shikali, J. C., & Muneja, P. S. (2024). Access to Library Information Resources by University Students during COVID-19 Pandemic in Africa: A Systematic Literature Review (No. arXiv:2404.08682). arXiv. https://doi.org/10.48550/arXiv.2404.08682.

Shoaib, M., Shamer, A., & Iqbal, S. (2025). A Systematic Review of Academic Library Spaces as Facilitators of Student Engagement in Higher Education Learning. The Knowledge, 4(1), 123-134. https://doi.org/10.63062/tk/2k25a.41045

Simón-Grábalos, D., Fonseca, D., Aláez, M., Romero-Yesa, S., & Fresneda-Portillo, C. (2025). Systematic Review of the Literature on Interventions to Improve Self-Regulation of Learning in First-Year University Students. Education Sciences, 15(3), 372. https://doi.org/10.3390/educsci15030372

Smart, C. M., Chim, L., Nicoll, P., Viczko, J., & Qualls, L. K. (2025). Skill, Will, and Time: A Feasibility and Pilot Efficacy Study of Two Structured Interventions to Enhance Undergraduates' Resilience Through Self-

Regulation. Emerging Adulthood, 13(1), 62–78. https://doi.org/10.1177/21676968241289630.

Stokes, P., Priharjo, R., & Urquhart, C. (2021). Validation of information-seeking behaviour of nursing students confirms most profiles but also indicates desirable changes for information literacy support. Journal of Documentation, 77(3), 680-702. https://doi.org/10.1108/JD-09-2020-0158.

Thompson AR, Vankayalapati A, Taliwal N. The Impact of Learning Approach and Study Habits on Student Performance in an Undergraduate Human Anatomy Course. Med Sci Educ., 35(4):2135-2144. doi: 10.1007/s40670-025-02424-6.

Tinabo, R., & Bakiri, H. (2025). The Impact of Library Usage on Academic Performance Among Students in Tanzanian Higher Learning Education. Regional Journal of Information and Knowledge Management, 10. 182-200. Doi: 10.70759/jtje5y06.

Tinajero, C., Mayo, M. E., Villar, E., & Martínez-López, Z. (2024). Classic and modern models of self-regulated learning: integrative and componential analysis. Frontiers in psychology, 15, 1307574. https://doi.org/10.3389/fpsyg.2024.1307574

Torrington, J., Bower, M., & Burns, E. C. (2024). Elementary students' self-regulation in computer-based learning environments: How do self-report measures, observations and teacher rating relate to task performance?. British Journal of Educational Technology, 55(1), 231-258.

Tsang, S.M.H., Cheing, G.L.Y., Lam, A.K.C., Siu A.M..H, Pang, P.C.K., Yip, K.C., Chan, J.W.K., & Jensen, M.P. (2023). Excessive use of electronic devices among children and adolescents is associated with musculoskeletal symptoms, visual symptoms, psychosocial health, and quality of life: a cross-sectional study. Front Public Health, 11:1178769. doi: 10.3389/fpubh.2023.1178769.

Umarji, O., McPartlan, P., Moeller, J. et al. The motivational system of task values and anticipated emotions in daily academic behavior. Motiv Emot, 45, 599–616 (2021). https://doi.org/10.1007/s11031-021-09898-y.

Viberg, O., Khalil, M., & Baars, M. (2020). Self-regulated learning and learning analytics in online learning environments: A review of empirical research. In Proceedings of the tenth international conference on learning analytics & knowledge (pp. 524-533).

Wahid, J., Nam, T. C., Ho, J., Cheng, B. T. Y., & Ibrahim, M. A. I. bin. (2024). Analysing Library Usage Patterns: A Visual Exploration of Book Loan and Room Reservation Trends. Journal of Digital System Development, 154–172. https://doi.org/10.32890/jdsd2024.2.1.10.

Wigfield, A., & Eccles, J. S. (2000). Expectancy–Value Theory of Achievement Motivation. Contemporary Educational Psychology, 25(1), 68–81. https://doi.org/10.1006/ceps.1999.1015.

Wijaya, K. (2021). The Important Role of Self-Regulation in Worldwide EFL Learning Contexts. Acuity: Journal of English Language Pedagogy, Literature and Culture, 7(1), 65–76. https://doi.org/10.35974/acuity.v7i1.2578.

Wijaya, K. F. (2024). The Positive Effects of Self-Regulation Strategy in EFL Reading Dynamics. Journal of English Language and Pedagogy (JELPA), 2(2), 64–73. https://doi.org/10.51826/jelpa.v2i2.742

Xu, L., Duan, P., Padua, S. A., & Li, C. (2022). The impact of self-regulated learning strategies on academic performance for online learning during COVID-19. Frontiers

in psychology, 13, 1047680. https://doi.org/10.3389/fpsyg.2022.1047680.

Yot-Domínguez, C., & Marcelo, C. (2017). University students' self-regulated learning using digital technologies. Int J Educ Technol High Educ., 14, 38. https://doi.org/10.1186/s41239-017-0076-8.

Zhang, R., Li, S., Hong, M., Zhou, Y., Lin, Y., Gao, Y., Hu, W., Ni, X., Wu, W., Lou, Y. (2023). Development and preliminary testing of a questionnaire to measure mobile health information-seeking behaviour in people with cancer. Nursing Open, 10 (7), 4536-4547. https://doi.org/10.1002/nop2.1700