

Learning readiness of students and its influence on digital library usage in tertiary institutions in Oyo State, Nigeria

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Abstract

This study investigates the learning readiness of tertiary institution students in Oyo State, Nigeria, and its influence on digital library usage. It explores the cognitive, emotional, and behavioural preparedness of students necessary for learning and how they influence engagement with digital library resources. Three research objectives were outlined for this study. Multi-stage sampling technique was used to select 380 students from two tertiary institutions in Oyo State. Data were collected using a structured questionnaire, and statistical analysis was conducted to assess students' level of learning readiness, their frequency of digital library usage, and the relationship between the two variables. Descriptive and inferential statistics, including mean scores, correlation and regression models, were applied to analyze the data. The results reveal moderate level of learning readiness among students (weighted mean = 3.25), with strengths in stress management and self-evaluation but weaknesses in time management, adaptability, and critical thinking. Digital library engagement was generally high (weighted mean = 3.10), with students showing confidence in using digital resources but limited access to academic databases. The regression analysis ($R = 0.152$, $p = 0.003$) indicates a weak but statistically significant relationship between learning readiness and digital library usage, suggesting that institutional factors such as access to resources and digital literacy training play a greater role in determining library usage than students' individual readiness alone.

Keywords: Digital Library Usage, Digital Literacy, Higher Education, Learning Readiness.

1. Introduction

Learning readiness is important, especially in higher education where the needed shift from theoretical knowledge to real-world business abilities is emphasized. Zine, Harrou, Terbeche, Bellacene, Dairi and Sun (2023) established a connection between academic knowledge and students' preparation for learning environment and business world in general. Similarly, Gökçearsan, Yildiz-Durak and Esiyok (2023) affirmed that challenges circumstances help to get students ready for learning and make them better prepared for the business world. Meanwhile academic success refers to the attainment of remarkable feats in students' leaning endeavours. Grades alone are not enough, more succinctly, academic success extends beyond attaining high grades, it also boards around acquiring knowledge, honing critical thinking abilities, and putting that knowledge to use in real-world situations.

In the same vein, the rapid adoption of digital libraries in schools has paved the way for a change in the academic environment. Kishor (2022) averred that digital libraries grant access to study materials, they are repositories of digital contents such as journals, e-books, conference proceedings and periodicals. The adoption and usage of digital libraries help students to take full advantage of digital library platforms for academic purposes. According to Sumithra and Sakshi, (2024) students who use digital libraries perform better academically, they are more focused, and they have a greater understanding of business and entrepreneurial principles.

A lot of researchers had worked on the relationship between academic success, e-learning readiness, and vocational trainings (Mack and Honig, 2024, Hidayat, Tamin, Herawati, Khairul and Syahmaidi, 2019). However, there lies a gap, which is evident in the intertwined relationship of learning readiness of tertiary institution students and digital library usage. Therefore, this study establishes a link between students' readiness to learn and their usage of digital library.

Learning Readiness

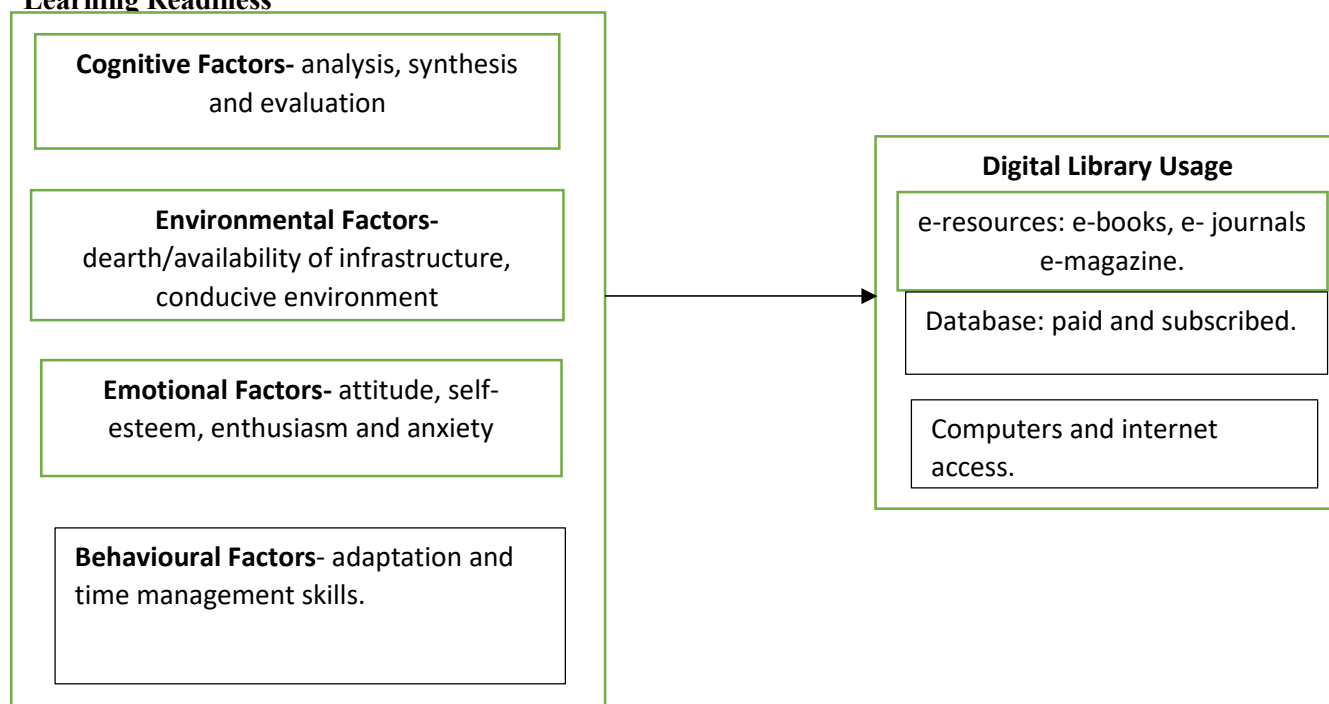


Figure 1. Theoretical Framework

2.1 Learning Readiness of Tertiary Students

Learning readiness refers to the extent to which students possess the necessary cognitive, emotional, and behavioural traits, abilities, and orientations to get involved in active learning. It is one of the germane elements which influences learning outcome-which is evident in the way in which students process and apply the knowledge acquired. The degree to which a person is equipped with the knowledge, values, and tools needed to participate in the learning process is referred to as learning readiness. It includes emotional stability, psychological preparedness, and environmental support networks in addition to intellectual aptitude. Dangol and Shrestha (2019) view learning readiness as an improved form of education which develops individual capabilities, learning readiness is dependent on a student's level of concentration and desire to learn.

Learning takes place in an atmosphere devoid of tension and anxiety, students might however get anxious, thus inhibiting free flow of learning. Dangol and Shrestha (2019) submitted that anxiety, evidently displayed through panic, discomfort and uncertainty, is highly prevalent among learners. They further x-rayed some overt symptoms of anxiety, which include cold fingers, palpitations, breathing difficulties, sweating, migraines and excessive breathing. Meanwhile, Morgan (2020) highlighted the covert symptoms, these include: feeling tense, having trouble thinking clearly, irrational thoughts and panicking. If students experience difficulty in connecting with the content as a result of anxiety, it inhibits their preparedness for learning; therefore underpinning the strong correlation between anxiety and learning readiness. Gökçearsan, Durak and Esiyok (2023) identified other causes of academic anxiety which includes; emotional disorder, poor study habit, low self-esteem, low intelligence, drug addiction, lack of exercise and physical deformity. Therefore, students who are unnecessarily anxious are typically not ready for learning- this by extension, has a negative impact on academic success.

Meanwhile, cognitive readiness, as opined by Wakenshaw, Agg, and Yang (2024) significantly influences active learning environment evident through blended learning which by extension influences students'

ability to critically interact with digital educational technologies and contents. These cognitive factors are expressed through higher-order thinking skills such as synthesis, and evaluation which are germane for students in processing, integration, and application of knowledge effectively. Meanwhile, Prihastiwi, Wiyono, Chusniyah, and Eva (2024) averred that emotional intelligence and self-efficacy have influence on self-directed learning readiness, especially in teaching environments powered by motivation. Emotional intelligence is reflected in students' self-esteem, attitude, enthusiasm, and anxiety. The findings of Purnamasari and Setyawan (2021) demonstrated that emotional and environmental influences are two pronged factors that affect clinical learning preparedness, especially in settings that are limited by resources. Finally, behavioural factors like adaptability and time management are also key determinants of learning readiness. As affirmed by Pei (2022) they affect how well students' disposition to their academic responsibilities and response to learning challenges.

2.2 Digital Library Usage

Digital library exists to ease study and research process, it paves the way for seamless and productive study. Therefore, the seamless manner through which digital libraries ease the usage and access to materials is made possible through knowledge, and digital literacy skills (Maharazu and Malumfashi, 2021). Although dearth of technology infrastructure still exists, however, Ikenwe and Anaehobi, 2020 averred that using digital libraries in Nigeria has been associated with better research production and academic success. Also, the core elements of digital libraries are e-resources, which include electronic books, journals, and research databases. These services give students easy access to academic content and improve their research skills. However, sufficient information literacy abilities are necessary for its efficient use. According to research, students' academic achievement is closely correlated with their capacity to access and use electronic resources.

Furthermore, Ayodele, (2023) averred that students are more engaged with digital libraries when well-organised and pertinent e-resources are available, which encourages self-directed learning and academic output. Structured and complete access to published research articles, reports, and research papers is made possible through databases. Universities subscribe to databases such as JSTOR, IEEE Xplore, and ScienceDirect for high-quality research resources. Ikenwe and Anaehobi (2020) averred that both lecturers and students' use of digital libraries is influenced by database accessibility. In Nigerian tertiary institutions, however, problems such a lack of restricted subscriptions, and inadequate database prevent optimal database access.

Meanwhile, the understanding of students' learning readiness and its impact on digital library usage in Nigerian tertiary institutions involves exploring several interrelated variables. Firstly, Diteeyont and Heng-Yu (2023) affirmed that cognitive readiness, reflects the mental preparedness and independence capacity of students. Similarly, the foundational base for digital library usage is hinged on environmental factors, such as availability of digital infrastructure and institutional support. For example, the findings of Chung, Subramaniam and Dass (2020) revealed dearth of stable and uninterrupted internet access, which remains an impediment to digital library usage in Nigerian institutions. Without these support systems in place, even students with high readiness level might find it difficult to access digital resources efficiently.

Similarly, students' emotional readiness, demonstrated through stress regulation and motivation, is linked to students' persistence and willingness in using digital learning tools. Wang, Xia, Guo, Xu and Zhao (2022) opined that students' emotional competence enhances resilience and fosters greater satisfaction with digital learning environments, thus paving the way for productive digital library use. Finally, behavioural readiness, as opined by Sumithra and Sakshi (2024) is mirrored through habits and attitudes toward technology, is a strong predictor of actual usage behaviour. Proactive students explore and utilize digital library resources, reflecting a habitual engagement with digital learning platforms. Therefore,

unhindered access and effective use of digital library platforms through e-resources, online databases, and internet facilities are facilitated or hindered by the aforementioned readiness factors.

3. Methodology

This study adopted a quantitative research design with a correlational approach to investigate the relationship between learning readiness and digital library usage among tertiary students in Oyo State, Nigeria. The target population comprised 40,000 students Ladoke Akintola University of Technology, Ogbomosho, and Emmanuel Alayande University of Education, Oyo. Multi-stage sampling technique and proportionate random sampling were employed to select a final sample size of 380 respondents, guided by Krejcie & Morgan's sampling table, however, 379 questionnaires were returned. A structured questionnaire was developed to form the primary instrument for data collection. Data collection was done through self-administered questionnaires distributed physically and via google form. Participants were assured of confidentiality and anonymity after prior consent was obtained. The research questions were answered using descriptive statistics, while simple linear regression was used to test the hypothesis at 0.05 level of significance.

4. Results and Discussion

Table 1. Level of tertiary institution students' learning readiness in Oyo State

Item	N	S	M	V	E	Mean	Σ	DECISION
I can analyze academic materials critically and apply them effectively in my studies.	13 (3.4%)	53 (14%)	160 (42.2%)	145 (38.3%)	8 (2.1%)	3.221	0.872	Low
I am capable of synthesizing and organizing information from different sources for learning.	12 (3.2%)	71 (18.7%)	104 (27.4%)	173 (45.6%)	19 (5%)	3.314	0.941	High
I frequently evaluate my academic progress and adjust my study strategies accordingly	3 (0.8%)	56 (14.8%)	167 (44.1%)	113 (29.8%)	40 (10.6%)	3.351	0.884	High
I have a positive attitude, enthusiasm, and self-confidence towards learning new concepts.	12 (3.2%)	71 (18.7%)	153 (40.4%)	128 (33.8%)	15 (4.9%)	3.172	0.891	Low

I effectively manage anxiety and stress related to academic work.	21 (5.5%)	49 (12.9%)	109 (28.8%)	163 (43.0%)	37 (9.8%)	3.392	1.013	High
I manage my time effectively and adapt to different academic challenges.	16 (4.2%)	93 (24.5%)	128 (33.8%)	129 (34.0%)	13 (3.4%)	3.081	0.942	Low

Note: N=379, N=Not at all, S=Somewhat, M=Moderately, V=Very well, E=Extremely. Weighted average=3.255

Table 1 reveals the degree of learning readiness among Oyo State university students. The respondents' weighted average score of 3.255 indicates a moderate level of learning readiness. The capacity of students to manage academic stress and anxiety has the highest mean score (3.392), suggesting that a sizable portion of students are capable of handling academic pressure. In the same vein, many students are self-reflective in their learning, as evidenced by the comparatively high mean score of 3.351 recorded in the capacity to assess academic progress and modify study techniques accordingly. On the other hand, students' time management and capacity to adjust to academic problems had the lowest mean score (3.081), indicating that a significant percentage of students have difficulty efficiently allocating their time for academic pursuits. Finally, a low mean score of 3.221 was found for the capacity to critically analyse academic materials and apply them in studies, suggesting that many students struggle to critically interact with academic information. These results imply that although students show favourable attitudes towards stress reduction and self-evaluation, they still struggle with critical thinking, time management, and flexibility, which might have an impact on their overall academic performance.

Table 2. Digital library usage rate of tertiary institution students in Oyo State

Item	N	SM	SO	G	VL	Mean	Σ	DECISION
I frequently use e-books, online journals, and other electronic resources for my academic work.	0 (0%)	115 (30.3%)	122 (32.2%)	121 (31.9%)	21 (5.5%)	3.132	0.912	High
The e-resources available in my institution's digital library meet my academic needs.	20 (5.3%)	89 (23.5%)	129 (34.0%)	116 (30.6%)	25 (6.6%)	3.101	1.003	High
I have access to academic databases (e.g., JSTOR, ScienceDirect, IEEE Xplore) for research purposes.	74 (19.5%)	102 (26.9%)	120 (31.7%)	72 (19.0%)	11 (2.9%)	2.593	1.091	Low
I am confident in my ability to search for and	7 (1.8%)	74 (19.5%)	152 (40.1%)	123 (32.5%)	23 (6.1%)	3.213	0.892	High

retrieve information from academic databases.									
I have access to a computer or other digital devices for accessing digital library resources.	3 (0.8%)	61 (16.1%)	163 (43.0%)	132 (34.8%)	20 (5.3%)	3.282	0.821	High	
The internet connection in my institution is reliable for using the digital library effectively.	5 (1.3%)	87 (23.0%)	151 (39.8%)	111 (29.3%)	25 (6.6%)	3.173	0.902	High	
I regularly utilize my institution's digital library to support my learning and research activities.	0 (0%)	64 (16.9%)	183 (48.3%)	112 (29.6%)	20 (5.3%)	3.231	0.792	High	

Note: N=379, N= Not at all, SM= To a small extent, SO= To some extent, G= To a great extent, VL= To a very large extent. Weighted average=3.104

The extent to which Oyo State university students use digital libraries is evaluated in Table 2. A typically high degree of engagement with digital library materials is shown by the weighted average score of 3.104. Students who have access to computers or other digital devices for the purpose of utilising digital library materials had the highest mean score (3.282). This implies that the majority of students possess the technology required to access digital learning resources. Additionally, students demonstrated a high degree of digital literacy with a mean score of 3.213, indicating confidence in their ability to seek and obtain material from academic resources. The lowest mean score (2.593), however, was recorded in access to academic databases like JSTOR, ScienceDirect, and IEEE Xplore, suggesting that many students do not have sufficient access to these vital research resources. Also, internet access reliability for using digital libraries was given a relatively good rating (3.173), indicating that although there may be connectivity problems, they might not be a significant obstacle. Overall, the results suggest that even if students possess the tools and technological know-how in taking full advantage of digital libraries, limited access to scholarly databases may reduce the efficacy of their research endeavours.

Table 3. The relationship between learning readiness of Oyo state tertiary institution students and digital library usage.

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	Change Statistics df1	df2	Sig. F Change
1	.152 ^a	.023	.021	.448	.023	8.941	1	377	.003

a. Predictors: (Constant) LEARNING READINESS

The relationship between students' use of digital library resources and their preparedness for learning is shown in Table 3. According to the model summary, The correlation coefficient (R) of 0.152 indicates a weak positive relationship between learning readiness and digital library usage. The R-squared value of 0.023 suggests that only 2.3% of the variation in digital library usage can be explained by students' learning readiness. The F-change value of 8.941 and significance level ($p = 0.003$) indicate that the

relationship is statistically significant, meaning that learning readiness does have a measurable, though small, influence on digital library usage.

These findings imply that although the desire of learners to learn has a statistically significant effect on their use of digital libraries, utilisation rates are probably more influenced by other characteristics including institutional support, resource accessibility, and digital proficiency.

Therefore, the results of this study provide important information on students' readiness for learning and how they use digital libraries in Nigerian higher education institutions in Oyo State. According to the results, students' learning readiness is moderate, with particular strengths in stress management and self-evaluation and significant shortcomings in time management, flexibility, and critical thinking abilities. These results are consistent with other research that highlights the value of self-directed learning and adaptation for academic performance (Dangol & Shrestha, 2019; Cigdem & Ozturk, 2024). The poor ratings in time management and critical analysis indicate that students could need more help honing these behavioural and cognitive abilities to improve their academic readiness.

Findings revealed that students with access to technical equipment showed confidence in utilising digital platforms and high degree of engagement with digital library material. However, a major obstacle was the restricted availability of scholarly resources like IEEE Xplore, ScienceDirect, and JSTOR. This result confirms the findings of Ikenwe & Anaehobi (2020) and Maharazu & Malumfashi (2021), who observed that students' research skills at Nigerian tertiary institutions are hampered by insufficient institutional subscriptions to scholarly databases. Students reported regular use of digital resources and dependable internet connection in spite of these drawbacks, suggesting that digital libraries are becoming more widely accepted and integrated into academic instruction. While students' readiness affects their use of digital resources, other external factors like institutional policies, the availability of digital resources, and training in digital literacy appear to have a greater impact. This is indicated by the weak but statistically significant relationship between learning readiness and digital library usage ($R = 0.152$, $p = 0.003$). This is in tandem with the argument made by Ayodele (2023) that institutional support and availability to well-structured e-resources are more important factors in driving the use of digital libraries than students' preparation for studying on their own.

5. Conclusion

This study presents empirical evidence on Oyo State university students' readiness for learning and how it relates to their use of digital libraries. According to the results, there are deficiencies in critical thinking, time management, and flexibility even when pupils show moderate levels of learning preparedness. Students also regularly use digital libraries, although efficient use is still significantly hampered by limited access to academic databases. The need for a more comprehensive strategy that includes institutional investment in digital infrastructure, training in digital literacy, and academic support systems is highlighted by the weak but statistically significant association between learning readiness and digital library involvement.

Based on the findings, the following recommendations are proposed: to assist students in improving their study habits and critical thinking abilities, regular workshops and seminars should be arranged, Universities should collaborate with governmental and non-governmental organizations to secure funding for improving digital library resources, Universities should invest in improving campus-wide internet access to ensure students can utilize digital library resources effectively, Universities should establish policies that promote the integration of digital library resources into course curricula.

References

- Ayodele, C. A. (2023). Students Learning Style and the Usage of Digital Libraries in the Implementation of Secondary Schools Curriculum in Nigeria. *International Journal of Education, Learning and Development*, 11(6), 16–25. <https://doi.org/10.37745/ijeld.2013/vol11n61625>
- Chung, E., Subramaniam, G., & Christ Dass, L. (2020). Online Learning Readiness Among University Students in Malaysia Amidst Covid-19. *Asian Journal of University Education*, 16(2), 45. <https://doi.org/10.24191/ajue.v16i2.10294>
- Dangol, R., & Shrestha, M. (2019). Learning Readiness and Educational Achievement among School Students. *International Journal of Indian Psychology*, 7(2). <https://doi.org/10.25215/0702.056>
- Diteeyont, W., & Heng-Yu, K. (2023). Competency levels and influential factors of college students' mobile learning readiness in Thailand. *Smart Learning Environments*, 10(1). <https://doi.org/10.1186/s40561-023-00266-6>
- Gökçearslan, Ş., Yildiz Durak, H., & Esyok, E. (2023). Emotion regulation, e-learning readiness, technology usage status, in-class smartphone cyberloafing, and smartphone addiction in the time of COVID -19 pandemic. *Journal of Computer Assisted Learning*, 39(5). <https://doi.org/10.1111/jcal.12785>
- Hidayat, H., Tamin, B. Y., Herawati, S., Khairul, K., & Syahmaidi, E. (2019). The contribution of technopreneurship scientific learning and learning readiness towards the entrepreneurship learning outcomes in higher vocational education. *Jurnal Pendidikan Vokasi*, 9(1), 21–32. <https://doi.org/10.21831/jpv.v9i1.20466>
- Ikenwe, J. I., & Anaehobi, S. E. (2020). Ability to identify extent of information need and access information as correlates of utilization of digital library resources by lecturers. *Digital Library Perspectives*, 36(3), 265–279. <https://doi.org/10.1108/dlp-03-2020-0015>
- Kishor, R. (2022). Digital Libraries and Their Impact on Academic Performance in Mathura's Higher Education Institutions: A Review. *Journal of Advanced Research in Library and Information Science*, 9(4), 15–20. <https://doi.org/10.24321/2395.2288.202206>
- Mack, A. J., & Honig, B. (2023). Comparing Factors Influencing Entrepreneurial Self-Efficacy Between Vocational and Academic Post-secondary Students. *Entrepreneurship Education and Pedagogy*, 7(4). <https://doi.org/10.1177/25151274231211555>
- Maharazu, N., & Hamisu Malumfashi, S. (2021). Accessibility, Awareness and Use of Egranary Digital Library Technology in Academic Library by Lecturers of Umaru Musa Yar'adua University Katsina, Nigeria. *Indian Journal of Information Sources and Services*, 11(2), 45–51. <https://doi.org/10.51983/ijiss-2021.11.2.2942>
- Morgan, H. (2020). Best Practices for Implementing Remote Learning during a Pandemic. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 93(3), 135–141. <https://doi.org/10.1080/00098655.2020.1751480>
- Pei, L. (2022). Exploring mental health stigma among chinese-english bilinguals: Dual-process model of emotional competence, flipped learning readiness, and academic performance in Mainland Chinese Universities. *Frontiers in Psychiatry*, 13. <https://doi.org/10.3389/fpsy.2022.1001796>
- Purnamasari, V., & Setyawan, A. (2021). Factors that Affecting Student's Learning Readiness in Clinical Practice. *Jurnal Keperawatan Respati Yogyakarta*, 8(1), 6–10. <https://doi.org/10.35842/jkry.v8i1.584>
- S. Sumithra, & Shivam Sakshi. (2024). Exploring the Factors Influencing Usage Behavior of the Digital Library Remote Access (DLRA) Facility in a Private Higher Education Institution in India. *Indian Journal of Information Sources and Services*, 14(1), 78–84. <https://doi.org/10.51983/ijiss-2024.14.1.4033>
- Wakenshaw, S., Agg, C., & Yang, L. (2024). Students' readiness for blended learning in UK higher education. *UK and Ireland Engineering Education Research Network Conference Proceedings 2023*. <https://doi.org/10.31273/10.31273/9781911675167/1649>
- Wang, Y., Xia, M., Guo, W., Xu, F., & Zhao, Y. (2022). Academic performance under COVID-19: The role of online learning readiness and emotional competence. *Current Psychology*, 42, 30562–30575. <https://doi.org/10.1007/s12144-022-02699-7>
- Wiwik Juwarini Prihastiw, Bambang Budi Wiyono, Tutut Chusniyah, & Eva, N. (2024). Self-Directed Learning Readiness Model: A Mediating Role of Self-Efficacy among Need-Supportive

Teaching Style, Transformational Parenting and Emotional Intelligence. *European Journal of Educational Research*, volume-13-2024(volume-13-issue-1-january-2024), 397–411.
<https://doi.org/10.12973/eu-jer.13.1.397>

Zine, M., Harrou, F., Terbeche, M., Bellahcene, M., Dairi, A., & Sun, Y. (2023). E-Learning Readiness Assessment Using Machine Learning Methods. *Sustainability*, 15(11), 8924.
<https://doi.org/10.3390/su15118924>