



LEARNER ACADEMIC SUPPORT SERVICES AND RETENTION OF STUDENTS IN OPEN DISTANCE LEARNING PROGRAMMES: THE CASE OF SELECTED UNIVERSITIES IN KENYA

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ABSTRACT

Purpose of the Study: The purpose of the study was to investigate the influence of learner academic support services on the retention of students in Open Distance Learning (ODL) programmes at the selected Universities in Kenya. The hypothesis of the study was that learner academic support services do not have a significant influence on retention of learners in Open Distance Learning (ODL) programmes at the selected Universities in Kenya.

Statement of the Problem: Open Distance Learning (ODL) programmes in most of the universities in Kenya have low retention. Open Distance Learning (ODL) programmes in Kenya continue to experience excessively high attrition rates as compared to face-to-face mode of learning. Open Distance Learning (ODL) programmes encounter significant issues with student retention, as they experience dropout rates that are 10% to 20% higher than traditional classroom settings. In fact, 40% to 80% of students enrolled in ODL programmes tend to leave before completing their courses. Specifically, in Kenyan universities, 15% of the overall student dropouts are from those enrolled in ODL programmes for a Bachelor of Education degree.

Methodology: The study was guided by the pragmatism paradigm and used a cross-sectional survey design. The target population for the study was 1990 learners and the

sample comprised of 322 Open Distance Learning (ODL) students pursuing Bachelor of Education related degree programmes in the three selected universities as determined by the Krejcie and Morgan (1970) formula using stratified random sampling with proportional sample size allocation. A research questionnaire was used to collect data. The study used regression analysis to test the research hypothesis at 5% significance level.

Results: Results indicated that there was a statistically significant positive and strong relationship between learner academic support services and the retention of students in ODL programmes ($r=0.775$; $p<0.05$). The advisory support, mentorship services, tutorial services, course materials support, and feedback cumulatively accounted for 60.1% of the variance in retention of learners in ODL programmes ($R^2=0.601$). The study established that course materials support ($t=3.403$, $p<0.05$), tutorial Services ($t=7.727$, $p<0.05$), and Mentorship Services ($t=4.295$, $p<0.05$) were the significant predictors of learner retention on ODL programmes while feedback ($t=-1.327$, $p>0.05$) and advisory support ($t=0.902$, $p>0.05$) were not significant predictors.

Conclusion: The study concludes that learner academic support services with respect to course materials, tutorial services and mentorship services have a significant influence on retention of learners in open and distance learning (ODL) programmes while feedback and advisory support have no significant influence.

Recommendations: The study recommends a routine revision of course materials to guarantee their relevance and alignment with the latest curriculum. It recommends the implementation of a policy framework that mandates continual training and refresher sessions for teaching staff, to ensure their competence in digital literacy. Furthermore, it recommends the establishment of a mentorship program aimed at providing students with academic, personal, and career guidance.

Keywords: *Distance Education, Student Retention, Academic Support, Learner Engagement, Online Learning Programmes.*

INTRODUCTION

Open Distance Learning (ODL) has quickly gained more enrollment of students and increased demand for the courses. Open Distance Learning (ODL) programmes has gained acceptability motivated by the quest of the working population to achieve higher qualifications (Pregowska, Masztalerz, Garlinska, & Osial, 2021). The acceptance of these courses is attributed to advancement in growth in information communication and

Technology (ICT), provision of learner support services responsive to the needs of distance learners and enhanced optimal learner interactions in distance learning (Shah & Cheng, 2018; Wells, 2023). The growth in ICT enables a two-way communication which was lacking in the early correspondence courses (Bozkurt, 2019). According to Alvin (2023), the high demand for ODL is motivated by the desire of working-class adults to upgrade their qualifications and skills because of anticipated returns on investment and associated advantages of Distance Learning such as flexibility in studying from anywhere, anytime and from the convenience of the learner. This advantage, for instance, has enabled women to juggle between pressing family commitments, work, and the pursuit of learning. Consequently, ODL has contributed to the increased participation of women in higher education globally (Katy, Barreda & Hein, 2021). Due to high mobility of the population across the globe, the need for a flexible mode of education provision is required to enable learning to continue uninterrupted and in such desperate times in which ODL has come in handy (Moore & Greenland, 2017).

Further, there is an increased demand for continuous skills and training and the advent of ICT has necessitated the adoption of distance education both at the corporate and individual level (Musa, Rosle, Bararuddin, & Siti, 2020). The critical issue being the autonomy of learners. Flexible distance learning application has been adopted as the critical driver to increase access and participation in higher education for the disadvantaged, traditional students and adult learners operating in unique circumstances (Aminudin, Navaratnasamy, & Saman, 2019). However, ODL institutions with huge enrollments face high dropout rates and low retention (Aminudin, Navaratnasamy, & Saman, 2019). According to Katy, Barreda and Hein (2021), ODL retention rates are a serious concern for colleges and universities across the globe. The distance learning programmes continue to experience high attrition rates and low retention. ODL learners have more challenges meeting task timelines and keeping in accord with completion of assignments and tasks compared to traditional classroom instruction (Perchinno, Bilancia & Vitale, 2023). ODL Students have been reported to have eighty-two per cent (82%) likelihood of completing a programme while face-to-face learners have a ninety per cent chance (90%) in similar programmes (Nurmalitasari, Zalizah A, & Mohammad, 2023). This disparity gets more pronounced when dealing with vulnerable students who are normally put under extra remedial teaching and first-generation students (Nurmalitasari, Zalizah, & Mohammad, 2023).

In the United Kingdom Open University (OUUK), face to face students were eighty-five per cent (85%) likely to succeed in their programmes as compared to ODL learners who were likely to successfully go through similar programmes at seventy-four per cent (74%) chance (Simpson & Sanchez, 2018). The dropout rates in Europe and North America have been estimated to range between 20% and 30% at times even greater, whereas attrition rates in the Asian continent, are estimated to be around 50% (Giennakopoulos, 2017). In African continent, the dropout rates is estimated to be in the range of 50% plus and whereby in Saharan Africa (SSA), ODL is characterized by high dropout rates (Musingafu, Mapurunga, Chiwanza, & Shupikai, 2015).

Kenya has high hopes of using ODL to increase education access, especially in higher learning (Kibuku, Ochieng & Wausi, 2020). The Universities Act of 2012 recognizes ODL and e-learning modes of delivery (Napier, 2021). Paper No. 1 of 2019 calls for ICT integration in education at all levels. The government of Kenya has put in efforts in addressing the issue of ICT access through MoE, key policy documents, Kenya's Vision 2030, blueprints, strategic plans and curricula that support the use of ICT in teaching and learning activities in all levels of education in Kenya. However, there are still challenges in ODL programmes in Kenya with respect to retention rates and other related challenges (Wambua, Gakuu, Kidombo & Ndege, 2019). Since ODL programmes are dependent on availability of ICT devices, ICT infrastructure, internet connectivity, and ICT capacity development; learner support services may influence the retention rates of the students (Olugbara, Letseka, & Akintolu, 2023; Aminudin, Navaratnasamy, & Saman, 2019).

Stakeholders in education agree that learner support impacts the retention rates in distance education (Perchinno, Bilancia & Vitale, 2023). On the other hand, it has been contended that learner support services when provided in the context of the needs of individual learners, help to enhance student retention in ODL programmes and that student support may be developed and targeted to address early symptoms of withdrawal from the institution (Dlamini, Rugube, Kunene, & Cosmas, 2021). Educators and researchers recommend suitable learner support interventions to ensure academic integration through enactment of appropriate strategies to enhance retention (Nurmalitasari, Zalizah, & Mohammad, 2023).

Learner support services in Open Distance Learning (ODL) may be defined as activities that are geared towards supporting students in undertaking educational activities (Hakan & Serpil, 2020). Learner support services are classified in various ways among them being learner academic support services (Simpson & Sanchez, 2018). These services are aimed

at providing an environment for collaborative learning and increasing interactivity amongst ODL stakeholders. Included in this category are services like study groups, support on request by educators, meetings, and seminars to guide learners to develop specific skills or bridging gaps and supervising student projects, (Muljana & Luo, 2019). When these are effectively addressed the learner will be academically integrated and be encouraged to persist (Olugbara, Letseka, & Akintolu, 2023). It is on this basis that the current study sought to investigate the influence of learner academic support services on the retention of students in ODL programmes at the selected Universities in Kenya.

STATEMENT OF THE PROBLEM

Open Distance Learning (ODL) programmes in most of the universities in Kenya have low retention. ODL programmes in Kenya experience excessively high attrition rates as compared to face-to-face mode of learning (Maritim & Makini, 2018). According to Njihia, Mwaniki, Ileri and Chege (2017), the main challenge facing ODL programmes is high student dropout rate with failed retention rates of between 10% - 20% higher compared to conventional learning. Between 40% and 80% of ODL students prematurely withdraw from learning. Private universities in Kenya have attrition level of 37% on average (Njoroge, Wangari, & Gichure, 2016). Mutuku (2019) notes that 15% of the total attrition in Kenyan universities is accounted by students pursuing ODL programmes related to the Bachelor of Education degree (Mutuku, 2019). The effects of attrition are far-reaching, including depression, stress, high chances of joblessness, and increased gender violence among women. Attrition disturbs academic progress, professional growth and negatively affects the self-esteem of the learners. Institutionally, attrition brings reputational damage, lessens competitive advantage and loss of money in the form of fees. To society, there is a loss in terms of reduced human capital and the benefits that accompany an educated populace (Mutambo *et al.*, 2018; Ojo, 2021).

Institutions providing Open Distance Learning (ODL) programmes have made commendable attempts to craft solutions for student retention challenges, yet these efforts have often been unsuccessful. Their focus has primarily been on improving internet connectivity, addressing the lack of access to personal ICT devices, and enhancing ICT literacy. Previous studies done in Kenya and with respect to Open Distance Learning (ODL) programmes have been scanty and inconclusive with diverse research gaps. For example, a study by Kisimbi (2019) examined how learner retention is influenced by hidden costs and learner characteristics and thus a research gap on the relationship between learner

support services and retention. Kisimbii, Gakuu and Kidombo (2020) on the other hand focused on administrative support services while the current study focused on learner academic support services. Other studies have been done outside Kenya and thus a contextual research gap (Itasanmi & Oni, 2020; Mutambo *et al.*, 2018; Ojo, 2021; Perera & Lekamge, 2021; Reju & Jita, 2018; Sunday A. Itasanmi *et al.*, 2020). It is on this research gap that the current study sought to establish the influence of learner academic support services on the retention of students in ODL programmes at the selected Universities in Kenya.

OBJECTIVE OF THE STUDY

The study sought to investigate the influence of learner academic support services on the retention of students in ODL programmes at the selected Universities in Kenya.

RESEARCH HYPOTHESIS

H₀: Learner academic support services do not have a significant influence on retention of learners in ODL programmes at the selected Universities in Kenya.

EMPIRICAL REVIEW

Learner academic support involves all actions and strategies beyond the production of learning materials put in place to help students to be successful in distance education studies. These may include tutoring, mentorship, supervisory support and advisory support. ODL requires student support as a key component (Dlamini, Rugube, Kunene, & Cosmas, 2021). Academic support entails effective communication from instructors with the qualities of promptness, timeliness and giving learning tasks that encourage participation (Shah & Cheng, 2018). Learner academic support has been defined as the art of building relationships with learners to support them link up with their areas of strength and ambitions while pursuing higher education (Arhin, Wangeri, & Kigen, 2017; Mapeleba, 2021). These include skills like techniques on individual study, efficient management of study time, making decisions concerning their future careers and utilization of institutional services available at the respective Universities. Learner academic support is specifically designed to help learners achieve cognitive and future career growth (Arhin, Wangeri & Kigen, 2017).

Another service that is important in the learner academic support services is mentorship. This support helps learners to sort out academic and social issues. This support involves strategies of learning, tips and insights on how to plan individual schedules and timetables

and skills on how to go about handling individual challenges. This type of support is meant to enable the learner to get integrated and overcome challenges. According to Ayse and Sercin (2022), mentors need to help students interact with staff and others to reduce the transactional distance and make learners comfortable and decide to persist. They give individual direction in matters regarding achieving academic goals and objectives and ability to be more directed. According to Ayse and Sercin (2022), mentors offer the highest level of structural support. Mentors utilize admission information to help focus on the specific learner need areas. Based on the unique needs and help-seeking behaviour, mentors encourage setting up of learning objectives and targets; help learners understand learning orientation, strength, area of improvement at initial stages-to use the information to develop plans, goals, assessment; advise learners on the exploration and retention; guide students to progress towards established goals and motivating them to determine their progress (Simpson & Sanchez, 2018).

According to Moore and Greenland (2017) and Imam (2020), distance learners require specific unique skills to enable them to succeed in ODL. Some of these skills are excellent cognitive learning skills, self-regulated; resilient in handling stress; good personality; apt skills in managing time as well as balancing family and job-related obligations. They argue that all these require four-pronged models with cognitive support, counselling, and organizational support and technical. Geesje (2020) and Hesrcu-Kluska (2019) articulate that tutors should be thoroughly equipped to enable interactions with the ODL delivery systems. Most ODL students need user skills especially information communication technology (ICT), all types of presence, interactions, and modalities of accessing all technology-based services (Aminudin, Navaratnasamy & Saman, 2019). Provision of learner support is vital in responding to the needs and goals of the diverse student populations (Dlamini, Rugube, Kunene, & Cosmas, 2021). Academic support has been found to enhance student retention in both ODL and the traditional face-to-face mode of learning, (Ayse & Sercin, 2022). This view has been supported by Arhin, Wangeri and Kigen (2017), who agree that most institutions keen on providing appropriate and efficient learner support are very aware of the likely effects on outcomes and retention of the students. According to Geesje (2020), the frequency of interactions with learner academic support services improves retention.

However, many tutors in ODL programmes have not demonstrated specific unique ICT skills for appropriate competencies and skills such as advising and career guidance (Arain,

Munishi & Khan, 2022). In addition, ODL campuses affiliated with most DE institutions are ill-equipped to offer optimum support and instead are mostly used as examinations centres (Mapheleba, 2021). Consequently, this hampers access and retention in ODL (Nyerere, 2016). Mapheleba (2021) further found that learner academic support services in many institutions are not efficient, not well organized, and not responsive to unique student needs. This situation always leads to student dissatisfaction. According to Mapheleba (2021), despite the poor state of learner academic support services, still more learners continue expressing the need for academic support and as such, this calls for proactive means to boost student retention. The argument is that, if the learner finds difficulty on the learning subject matter, it can form a basis for deciding to drop out (Arain, Munishi, & Khan, 2022).

Despite the existing research, there exists an insufficient understanding of the impact that educators have on students' decisions to either continue their studies or withdraw. Gaining insights into this area is crucial for developing effective strategies to reduce student attrition. Despite the availability of this knowledge, there has been scanty and inconclusive studies conducted to determine how learner academic support services influence the retention of ODL students, especially in the Kenyan context. The current study seeks to bridge this research gap by investigating the influence of learner academic support services on the retention of students in ODL programmes at the selected Universities in Kenya.

THEORETICAL REVIEW

The study utilized the Bean and Metzner Non-traditional Undergraduate Student Attrition Model as its foundational theory, originally proposed by Bean and Metzner in 1985. This model evolves from Bean's earlier student attrition models developed in 1980 and 1982. The theory posits that non-traditional learners are more significantly impacted by external environmental factors than by the internal community of the institution. It places considerable emphasis on the external elements that contribute to the retention of learners in distance education. This model has four tenets that affect retention: academic performance, intention to leave, background and defined factors and lastly environmental factors. According to this theory, ODL learners who do not excel academically have a high chance of withdrawing. The intent to drop out is related to psychological issues than is to intellectual factors. Meaning that the social and psychosocial aspects play a great role in decisions of departing. The background defined characteristics mean the previous entry behaviour from high school, age, enrollment status, accommodation issues, goals and

commitments, gender and are considered potential predictors of retention. Finally, the theory asserts that the environmental variable plays a role in the decision to be retained or dropping out. In this category are financial standing, effort in hours devoted to work, emotional support from parties outside the academic institution, family obligations and freedom of transferring to an institution of your choice. This theory was found appropriate to this study because it articulates unique circumstances and factors that influence the retention of distance learner in ODL, which are the main focus of the current study, examining ODL learners who are adults with various responsibilities like, work, family and studies and are striving to achieve education qualifications amid these circumstances.

CONCEPTUAL FRAMEWORK

Figure 1 shows the study conceptual framework which shows the relationship between learner academic support services and retention in ODL programs.

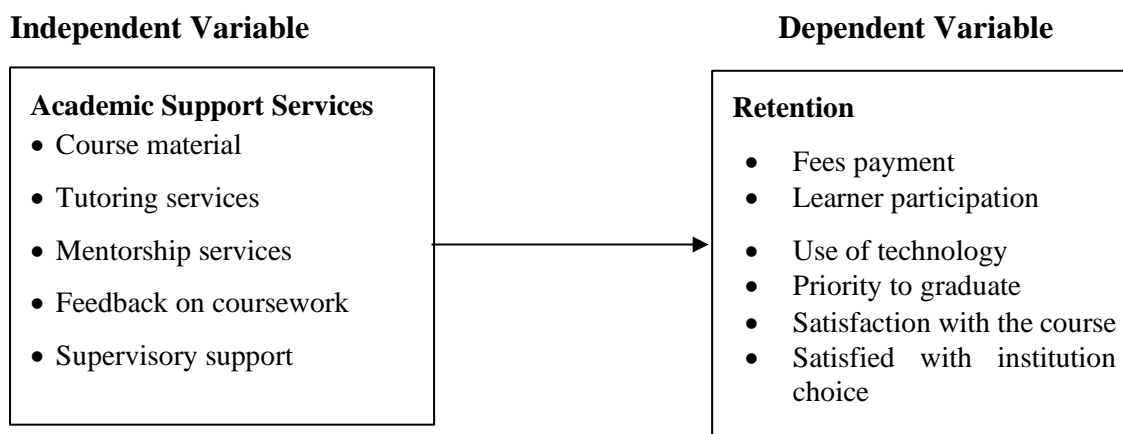


Figure 1: Conceptual Framework

RESEARCH METHODOLOGY

The study was guided by the pragmatism paradigm and used a cross-sectional survey design. The target population for the study was 1990 learners enrolled in the Bachelor of Education Programmes by distance education in University of Nairobi SMIS, 2021, Kenyatta University SMIS, 2021 and Mount Kenya University SMIS, 2021. These were the only universities offering Bachelor of Education Programmes by distance education and with significant enrolments and accredited by the Commission for University Education (CUE). The study sample comprised of 322 ODL students pursuing Bachelor of Education related degree programmes in the three selected universities as determined by the Krejcie and Morgan (1970) formula using stratified random sampling with proportional sample size

allocation. Research questionnaire was used to collect data. For validity, Supervisors examined all the items of the tool checking on readability, clarity and comprehensiveness and made a final decision on which items to be included in the final tool. This study used an internal consistency reliability test based a pilot study of 20 students and from which the alpha coefficient for learner academic support services was 0.915 against a threshold of 0.7. The study used regression analysis to test the research hypothesis at 5% significance level.

RESULTS AND DISCUSSIONS

The study hypothesis aimed to examine the extent to which academic support services provided to learners affected their retention in Open Distance Learning programmes at the chosen Kenyan universities. With respect to this, a multiple linear regression was performed regressing advisory support, mentorship services, tutorial services, course materials support, and feedback as metrics of learner academic support services against retention of learners in ODL programmes. Table 1 shows the model summary on the influence of learner academic support services on retention of learners.

Table 1: Influence of Learner Academic Support Services on Retention of Learners

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.775 ^a	0.601	0.594	0.49176

a. Predictors: (Constant), Advisory Support, Mentorship Services, Tutorial Services, Course Materials Support, Feedback

An R-value of 0.775 was achieved on the regression model regressing advisory support, mentorship services, tutorial services, course materials support, and feedback against retention of learners in ODL programmes. This implies that there was a strong relationship between the observed and predicted values of retention of learners in ODL programmes. This therefore indicates that the model provided a good fit for the data and that it can be used to fit data for retention of learners in ODL programmes. The R-Square value of 0.601 was achieved in this model. This implied that advisory support, mentorship services, tutorial services, course materials support, and feedback cumulatively accounted for 60.1% of the variance in retention of learners in ODL programmes. This further implies that 39.9% of the variation in learner retention in ODL programmes is explained by other factors that were not under consideration in this model. The achieved value of adjusted R-Square was 0.594. This therefore implies that the significant predictors in the model

accounted for 59.4% of the variance in retention of learners in ODL programmes. Therefore, 40.6% of the variation in learner retention in ODL programmes is explained by other factors that were not considered in the model as well as non-significant predictors (among the academic support services) in the model. The standard error of the estimate achieved in this model was 0.49176 which indicated that the model predicting learner retention in ODL programmes using advisory support, mentorship services, tutorial services, course materials support, and feedback as predictors, was more accurate. Table 2 shows the significance of the model.

Table 2: Model Significance for Academic Support Services and Retention of Learners

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	101.413	5	20.283	83.873	0.000 ^b
	Residual	67.228	278	0.242		
	Total	168.641	283			

a. Dependent Variable: Retention of Learners

b. Predictors: (Constant), Advisory Support, Mentorship Services, Tutorial Services, Course Materials Support, Feedback

The results indicate F-statistic value of 83.873. The p-value was less than 0.05 and thus implying that the regression model as a whole was statistically significant. This further indicates that at least one of the predictors in the multiple regression model is significant. The findings imply that the model provides a better fit for the data more than a model with zero predictors. The study further sought to establish the sensitivity of the regression model by evaluating the model coefficients as shown in Table 3.

Table 3: Model Coefficients for Academic Support Services and Retention of Learners

Model		Unstandardized		Standardized		
		Coefficients		Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	1.225	0.155		7.922	0.000
	Course Materials Support	0.170	0.050	0.237	3.403	0.001
	Tutorial Services	0.469	0.061	0.527	7.727	0.000
	Mentorship Services	0.123	0.029	0.171	4.295	0.000
	Feedback	-0.056	0.042	-0.095	-1.327	0.186
	Advisory Support	0.048	0.053	0.076	0.902	0.368

a. Dependent Variable: Retention of Learners

The study established that among the five predictor variables of learner retention, three were significant predictors and two were non-significant predictors. With respect to this, it was found that course materials support, tutorial services and mentorship services were the significant predictors of learner retention on ODL programmes while feedback and advisory support were not significant predictors. This implied that course materials support ($t=3.403$, $p<0.05$), tutorial Services ($t=7.727$, $p<0.05$), and Mentorship Services ($t=4.295$, $p<0.05$) significantly influence the level of learner retention in ODL programmes based on their t-statistic values and their associated p-values. On the other hand, it noted that feedback ($t=-1.327$, $p>0.05$) and advisory support ($t=0.902$, $p>0.05$) did not significantly influence the learner retention in ODL programmes based on the t-statistic and p-values. Focusing on the unstandardized beta coefficients, it implies that one unit increase in course materials support leads to 0.170 units ($\beta=0.170$) increase in retention of learners in ODL programmes with other factors held constant. Similarly, the study revealed that one unit increase in tutorial services would result into 0.469 units ($\beta=0.469$) increase in learner retention in ODL programmes while other factors are held constant. One unit increase in mentorship services was found to result into 0.123 units ($\beta=0.123$) increase in the level of learner retention in ODL services. The feedback and advisory support given to student has very small but non-significant influence and thus would not constitute the regression model for the influence of academic support services on retention of learners in ODL programmes. Among the significant predictors of the learner retention in ODL Programmes, support in regard to tutorials had the highest influence on learner retention

in ODL Programmes, followed by support on course materials and mentorship had the least influence on retention of learners.

The first hypothesis of the study stating that; H_{01} : Learner Academic support services do not have a significant influence on retention of learners in ODL programmes at the selected Universities in Kenya, was rejected at 5% significance level. This therefore implies that learner academic support services have a significant influence on retention of learners in ODL programmes at the selected Universities in Kenya in regard course materials support as well as tutorial and mentorship services. In line to this, Ojo (2021) found that academic support by the universities such provision of adequate learning materials and provision of results affected the rate in which learners were retained in open and distance learning in Nigeria.

CONCLUSION

The study concluded that learner academic support services with respect to course materials, tutorial services and mentorship services have a significant influence on retention of learners in open and distance learning (ODL) programmes. However, learner academic support services with respect to feedback and advisory support have no significant influence on retention of learners in open and distance learning (ODL) programmes.

RECOMMENDATIONS

The study recommends course materials to be reviewed regularly to ensure that they are up-to-date and relevant to the current curriculum. There should be policy framework to guide on the regular training and refresher courses for the academic staff to enable them to be digitally literate. The mentorship program should be designed to provide academic, personal, and career guidance to students. The study recommends that the university should provide specialized training and support to mentors, which will arm them with the necessary skills for delivering impactful mentorship. It also recommends the creation of centralized advisory services to enable more personal, face-to-face interaction with students. Additionally, the study suggests that academic advisors should regularly monitor the academic progress of students and provide immediate feedback to assist them in their educational pursuits.

REFERENCES

- Alvin, S. (2023). Its below My Expectation:A case Study of UMN Online Learning Students. *Int Sciencesernational Journal of education review, Law and Social*, 843-849.
- Aminudin, Z., Navaratnasamy, K., & Saman, T. (2019, August 2). Supporting Students to succeed in Open and Distance Learning in the Open University of Sri Lanka and Universita Indonesia. *Emerald insight*, 7-10. Retrieved August 2, 2023, from www.emeralinsight.com/2414.6994.htm
- Arain, S., Munishi, P., & Khan, S. (2022). Learner Support Services in ODL:Gaps at Regional Level in Sindh,Pakistan. *International Journal of Education and Innovation*, 3(1), 154-163. Retrieved August 18, 2023, from ijrjei.com
- Arhin, V., Wangeri, T., & Kigen, E. (2017). Academic advising and student retention in distance learning.The case of University of Cape Coast,Ghana. *Journal of Education and Social Research*, 7(3). Retrieved December 8, 2018
- Ayse, B., & Sercin, K. (2022). Why do Open and Distance Education Students Drop Out ? Views from Various Stakeholders. *International Journal of educational Technology in Higher Education*, 19(28), 1-22. Retrieved from <https://doi.org/10.1186/S41239-022-00333-X>
- Bean, J. (1980). Dropouts and turnover:The synthesis and test of a causal model of student attrition. *Research in Higher Education*, 12(2), 155-187. Retrieved September 22, 2020, from <http://dx.doi.org/10.1007/BF00976194>
- Bean, J. (1982). Conceptual Models of student Attrition:How theory can help the institutional researcher. *New directions for institutional research.*, 1982(36), 17-33. Retrieved September 22, 2020, from <http://dx.doi.org/10.1002/ir.37019823604>
- Bean, J., & Metzner, B. (1985). A conceptual Model of Non-traditional Undergrdauate Student Attrition. *Review of educational research*, 55(4), 485-540. Retrieved September 22, 2020, from <http://dx.doi.org/10.3102/00346543055004485>
- Bozkurt, A. (2019, August 2). From Distance Education to Open and Distance Learning.A Holistic Evaluation of History,Definition,and Theories. *Handbook of Research on*

- Learning in the Age of Transhumanism, 252-272. Retrieved August 02, 2023, from <https://orcid.org/0000-002-4520-642x>
- Dlamini, P., Rugube, T., Kunene, E., & Cosmas, M. (2021, April). Developing A sustainable Student Support Services Framework for a Distance Learning Institution. *International journal of education and Reserach*, 9(4), 55-56. Retrieved may 9, 2023, from www.ijer.com
- Fu, H. (2022). Optimal strategies for Realizing the value of Open University Learning Supprt Services in the internet. *Era Open Journal of social Sciences*, 10(1), 183-192.
- Geesje van de, B. (2020, August 18). Context Matters :Student Experiences of Interaction in Open Distance Learning. *Turkish Online Journal of Distance Education*, 21(4), 223-224. Retrieved August 18, 2023, from <https://files.eric.ed.gov/fulltext/EJ1269626.pdf>
- Giennakopoulos. (2017). Attrition in Higher Education:From a problem to a wickede problem or a pure case of Economics.
- Hakan, G., & Serpil, K. (2020). Determining needs and Priorities of Learners with special needs for support services in an Open and dsitance learning context in Turkey. *Open Praxis* , 359-382.
- Hesrcu-Kluska, R. (2019). The Interaction between learners and leraners-Facilitator in an Online Learning Environment. *Creative Education*, 10(7), 1713-1730. Retrieved from <https://doi.org/104236/ce.2019.107122>
- Imam, A. (2020). Learner support Systems and Blended ODL programmes. *International Journal of Research in education and Sustainable development*, 20-26.
- Itasanmi, S., & Oni, M. (2020). Determinants of Learner's satisfcation in Open Dsitance Learning Programmes in Nigeria. *Pakistani Journal of Distance and Online learning*, 6(2), 1-10.
- Katy, S., Barreda, A., & Hein, S. (2021). Retention Strategies for Online Students:A systematic literature Review. *Journal of Global Education and Research*, 5(1), 72-84. Retrieved August 16, 2023, from <https://www.doi.org/10.5038/2577-509X.5.1105>

- Kenyatta university. (2021, March 20). Students taking Bachelor of Education programmes by Distance Education. Nairobi, Kenya. Retrieved from <https://smis.ku.ac.ke>
- Kibuku, R., Ochieng, O., & Wausi, A. (2020, August 23). e-Learning Challenges Faced by Universities in Kenya: A literature Review. *Electronic journal of e-Learning*, 150-160. Retrieved August 23, 2023, from www.ejel.org
- Kisimbii, J., Gakuu, C., & Kidombo, H. (2020). Administrative Support Services and Retention of Distance Learners: The Case of Bachelor of Education Programmes of the University of Nairobi, Kenya. *International Journal of Science and Research (IJSR)*, 97-106.
- Krejcie, V., & Morgan, D. (1970). Determining Sample Size For Research Activities. *Educational And Psychological Measurement*, 30, 1-4.
- Mapheleba, L. (2021). Postgraduate Students' Perceptions of Support services Rendered by a Distance Learning Institution. *International Journal of Higher Education*, 11(7), 1-13. Retrieved September 3, 2023, from <https://doi.org/10.5430/ijher.v11n7p24>
- Maritim, E., & Makini, D. (2018). Scalability of learners' success in e-learning: A survey of the learners' perspectives at Egerton University, Kenya. *European Journal of Open, Distance and E-learning*, 21(1).
- Moore, C., & Greenland, S. (2017). Employment-driven online student attrition and the assessment policy divide: An Australian open-access higher education perspective. *Journal of Open, Flexible and Distance Learning*, 21(1), 52-62.
- Mount Kenya University. (2021, March 20). Students taking Bachelor of education by distance education. Nairobi. Retrieved from <https://smis.mku.ac.ke>
- Muljana, P., & Luo, T. (2019). Factors Contributing to student Retention in Online Learning and Recommended Strategies for Improvement : A systematic Literature Review. *Journal of Information Technology Education*, 18, 19-57. doi:10.28945/4182
- Musa, H., Rosle, A., Bararuddin, F., & Siti, I. (2020). The Effectiveness of Online Distance Learning ODL Approach in University: A Response of COVID-19

- Pandemic Crisis'. *Journal of Academic Research In Business and Social Sciences.*, 10(9), 1069-1070.
- Musingafu, M., Mapurunga, B., Chiwanza, K., & Shupikai, Z. (2015). Challenges for Open and distance learning (ODL):Experience from students of the zimbabwe open university. *Journal of Education and Practice*, 6(18).
- Mutambo, N., & Winterbottom, M. (2018). Effectiveness of Study Centres in Supporting Open and Distance Learning at Makerere University. *Makerere Journal of Higher Education*, 10(1), 45-59. Retrieved from <https://doi.org/10.4314/majohe.v10i1.3>
- Mwaniki, E., Ileri, A., chege, F., & Njihia, M. (2022, August 01). Obstacles to Successful Uptake of Open Distance and E-Learning (OdeL)Programmes:A case of Kenyatta University ,Kenya. *African Multidisciplinary Journal of Research*. Retrieved from <https://journal.Spu.ac.ke/index.php/amjr/article/view/66>
- Napier, E. (2021). Getting Excited for our Class:Instructor Immediacy,Rapport, and Effects for Students. Doctoral Dissertation,East Tennessee State University.
- Njihia, Mwaniki, Ileri and Chege. (2017, March 17). Uptake of Open Distance and E-learning (ODEL) Programmes:A case of Kenyatta University. *Reserachgate*.
- Nurmalitasari, Zalizah, L., & Mohammad, F. M. (2023). Factors influencing Dropout of students in Higher Education. *Education Reserach International*, 1-13.
- Nyerere, J. (2016). Open and distance Learning in Kenya:A baseline survey Report Commissioned by the Common Wealth of Learning. Nairobi: CoL.
- Ojo, O. (2021). Learning Resources and Efficiency of Open Distance Learning Programmes in Kwara State,Nigeria. *Pakistan Journal of Distance and Online Learning*, 7(2), 37-54.
- Olugbara, T., Letseka, M., & Akintolu, M. (2023). Studednt Support as Panacea For Enhanching Student Success In An Open Distance Learning Environment. *Journal of Educators Online*, 20(3). Retrieved August 7, 2023
- Perchinno, Bilancia, M., & Vitale, D. (2023). A statistical Analysis of factors Affecting Higher Education Dropouts. *Social Indicators Research*, 340-345.

- Perera, K., & Iekamege, G. (2021). The impact of open and Distance Learning materials on mindfulness Practices of Primary School Teachers. *Journal of Social Science*, 9(5), 83-94.
- Pregowska, A., Masztalerz, K., Garlinska, M., & Osial, M. (2021). A Worldwide Journey through Distance Education-From the Post Office to Virtual, Augmented and mixed Realities, and Education during the COVID-19 pandemic. *Education Science*, 11(118), 1-26. Retrieved August 23, 2023, from
- Reju, C., & Jita, L. (2018). Instructional Delivery and Students' Experiences with Distance Learning and online Learning of Undergraduate Mathematics in Nigeria. *International Review of Research in Open and Distance Learning*, 19(2), 111-125.
- Shah, M., & Cheng, M. (2018). Exploring factors impacting student engagement in open access courses. *Open Learning. The Journal of Open, Distance and e-Learning*, 1-16.
- Simpson, O., & Sanchez, A. (2018, August 02). Developing Student Support for Open and distance Learning. *Journal of Interactive Media in Education*, 3-7. Retrieved 2023
- University of Nairobi. (2021, January). University of Nairobi. Retrieved from www.uonbi.ac.ke: <https://smis.uonbi.ac.ke>
- Wambua, R., Gakuu, C., Kidombo, H., & Ndege, S. (2019). Learner support System and Academic performance of distance learning students in selected Kenyan Public universities. *Teacher Education Through Flexible Learning*, 1(1).
- Wang'eri, M., Njoroge, M., & Gichure, C. (2016). Examination repeats, Semester deferment and Dropping Out as contributors of attrition rates in private Universities in Nairobi County Kenya. *International Journal of Education and Research*, 4(3), 1-16.
- Wells, R. (2023). The Impact and Efficacy of E-Counselling in an Open Distance Learning Environment: A mixed methods Exploratory Study. *Journal of College Student Psychotherapy*, 155-172.