

The Link between Learner Support Services and University Student Satisfaction with Online Learning in Kenya: A Case Study of Zetech University

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Abstract: The aim of this study was to determine the link between learner support services and university student satisfaction with online learning in Kenya. The independent variables of the study included awareness of where information on course administration is found, knowledge of a student support office and enhanced academic support. The dependent variable was university student satisfaction with online learning. The study was anchored on "Transactional Distance Theory (TDT)". The study's target population was 10,000 students registered for different courses at Zetech University. Simple random sampling was used to sample 385 respondents. Primary data was collected using a semi structured questionnaire. Regression analysis was conducted using STATA statistical software. Findings indicated that there is a strong link between learner support services and university student satisfaction with online learning. Results of the study indicate that awareness of where information on course administration is found, knowledge of a student support office and enhanced academic support have a significant link with student satisfaction with online learning in Kenya. This study will benefit researchers and management of Universities in Kenya.

Keywords: Student Satisfaction, Learner Support, Academic Support.

I. INTRODUCTION

On 12 January 2020, the World Health Organization (WHO) confirmed that an unusual coronavirus had given rise to a respiratory illness in Wuhan City, China. The virus had spread all over the world and schools and universities were forced to close down in response to the pandemic and this led to the growth and importance of online learning (Koksal et al., 2020; Wider, Chua, Mutang, & Pan, 2023). Online learning became very important in universities not just as a means to complete courses but to continue communicating and interacting with students. Educational institutions worldwide have shifted to offering online courses and this has been made easier by the rapid development of information technologies (Babolan, Kia, & Derakhshanfard, 2016). Online learning has become very popular among university students as supported by a Chegg.org survey which found that a large percentage of students in Malaysia, Canada, and China prefer online learning over traditional face-to-face learning (Karupiah, 2021). The latest online learning report by Allen and Seaman (2013) shows that enrolment in distance education is still growing, with a rate of 3.9%. In 2014, 5.8 million US students were enrolled in distance education, one half of which are learning in a fully online environment. Online learning is a new paradigm that is based on information technology (Moore, 1993). There remains an answered question as to whether online learning can produce better outcomes and academic achievements than traditional learning. Analyzing student satisfaction can help to answer this question.

Learner satisfaction is an important indicator of the quality of learning experiences (Moore & Kearsley, 1996; Yukselturk & Yildirim, 2008). It is important to investigate online learner satisfaction because technology has changed the way students interact with instructors and fellow classmates (Kaminski, Switzer, & Gloeckner, 2009). Various studies have been conducted to determine whether traditional or face to face learning methods are more productive than online or hybrid learning (Lockman & Schirmer, 2020; Pei & Wu, 2019; González-Gómez et al., 2016) but most of these studies have been conducted in developed countries with more advanced educational systems and easier access to technology. However, very little literature is available on the link between learner support services and student satisfaction and this study seeks to fill this gap.

In East Africa, the Open University of Tanzania which was established in 1992, was the first fully fledged distance learning university offering both undergraduate and graduate degrees. Virtual University of Uganda (VUU)

was the first online university in East Africa and opened in January 2012. The Kenyan National Assembly approved the establishment of the Open University of Kenya on July 6, 2023. After a very rigorous inspection by Commission for University Education Zetech University was accredited as an ODEL center on 28th February 2022 allowing them to enroll, admit, teach and examine students online. Zetech University conducts all its courses using a blended learning approach where all students take some of the courses online and others via face to face learning mode. Therefore, the target population will include all students registered for courses at Zetech University. Based on data from the registrar's office, Zetech University has a total population of 10,000 students as at the time of this study. This study proposed that knowledge of where information on course administration is found, available student support office and availability of academic support play a key role in student satisfaction with online learning.

1.1 Objectives of the Study

The general objective of this study was to determine the link between learner support services and student satisfaction with online learning in Kenya.

1.1.1 Specific Objectives

The study was guided by the following objectives: To assess the link between awareness of where information on course administration is found and university students' satisfaction with online learning in Kenya, to investigate the link between knowledge of a student support office and students' satisfaction with online learning in Kenya and to establish the link between enhanced academic support and students' satisfaction with online learning in Kenya

II. LITERATURE REVIEWS

2.1 Transactional Distance Theory

Moore (1993) created Transactional Distance Theory (TDT), to provide a structure for comprehending how learning occurs in non-classroom environments like online learning. The transactional distance theory identified three factors that influence online student satisfaction: course structure/design, conversation and control over own learning (Abuhassna et al., 2020). Moore (1993) defined course structure as not just how the course content is organised, but also the accessibility of course material, effective instructor feedback and effective use of technology to support learning. A well-designed course is very critical because it motivates students to interact with course materials and it fosters a sense of community (Moore & Kearsley, 2012). Availability and accessibility of course material can be considered as part of the online learner support services which are very critical to the success of online learning.

The level of interaction between instructors and students is another important factor that influences student satisfaction with online courses and this is also part of learner support services. Moore (1993) classified online interactions into three types: student-student, student-instructor, and student-course content. A balance of the three types of interactions is required for effective online learning. Instructor-student interactions must be supportive and timely. Instructors must communicate effectively by providing feedback, asking questions, and encouraging students to participate in course content (Means et al., 2013). All these factors are part of learner support services. TDT also emphasizes the importance of autonomy, or control over one's own learning, to take ownership of the learning experience. Self-paced learning, opportunities for self-assessment, and the use of technologies that support independent learning could all help with this (Means et al., 2013).

TDT also emphasizes the significance of course structure including assessment, conversation and support services, and autonomy in facilitating effective online learning. In order to create engaging and effective online courses that meet the needs of online students, instructors and course designers must pay close attention to all these factors and hence the need for this study to determine how course design, learner support services and assessment methods influence the satisfaction of students in the online learning courses. Online students are more likely to be satisfied with their learning experience and successfully retain the knowledge acquired if the three factors are enhanced.

2.2 Learner Support Services and student Satisfaction

Student support is a prerequisite for the success of online learning (Woodley & Simpson, 2014) because it is said to support student retention and reduce drop out cases (Rotar, 2020). Different universities have different online student support models. Moore and Kearsley (2012) proposed a transactional distance theory that emphasizes and supports the concept of online learner support. Online learner support helps to reduce the transactional distance between tutors and online students. According to Brindley (2014), "support systems for online learners help the students to succeed in their studies. Despite the obvious significance of online learner support, little research has been conducted to analyse the support strategies or interventions by specific universities.

Gakuu and Omondi (2011) stated that there are various online learner support services offered by different universities. The first category of learner support is referred to as academic support and is offered by tutors. The second category of online learner support is non-academic support which involves organisational and emotional support

(Simpson, 2013). This support helps learners to effectively manage their time, develop self-confidence and motivation for learning and manage assessment stress among others.

III. METHODOLOGY

3.1 Population and Sampling

The general objective of this study was to determine the link between learner support services and student satisfaction with online learning in Kenya. A structured questionnaire was used to collect primary data from online learning students in Zetech University. A descriptive research design was adopted for the study.

The target population for the study was 10,000 students enrolled for different courses in Zetech University. A sample size of 385 respondents was drawn using simple random sampling technique.

The formula proposed by Yamane, (1967) was applied in sample size determination as follows:

: Equation (1) $n = \frac{N}{1+N(e)^2}$

From this formula, n was the sample size, N was the population size and e was the confidence level (0.05). Using N = 10,000 in the formula, the resulting sample size (n) was 385 and is distributed as shown in Table below.

$$n = \frac{10000}{1+10000(0.05)^2}$$

$$n = \frac{10000}{26}$$

$$n = 384.61$$

$$n = 385$$

3.2 Data Collection

This study collected primary data to measure the perceptions of students regarding their satisfaction with online learning. A structured self-administered questionnaire was used to collect primary data from 385 respondents. The questionnaire included multiple choice and Likert scale questions. A questionnaire was chosen because it offers convenience in collecting primary data from respondents since they can fill it during their free time or such a time when their workload is manageable. The structured questions minimize response variation, take less time to code and transcribe and they lead to increased response rate. Questionnaires are also highly recommended for descriptive designs.

IV. RESULTS

The study adopted Multinomial logit regression since the dependent variable (Satisfaction) is a categorical variable. The STATA statistical software was used to develop multiple regression analysis models which helped to describe the link between the independent variables of the study which included awareness of where information on course administration is found, knowledge of a student support office and enhanced academic support and the dependent variable, student satisfaction with online learning. The coefficient of determination was used to determine whether the models were significant and the extent to which each of the independent variables explained changes in the dependent variable. Variables are significant at p value of 0.10, so all variables with a p value of 0.10 and below are significant. This will help to determine whether there is a link between online support services and university student satisfaction with online learning at Zetech University.

Table 1: Link between learner support services and student satisfaction in online learning at Zetech University

<i>Satisfied With OL</i>	STRONGLY DISAGREE	DISAGREE	NEUTRAL	STRONGLY AGREE
	<i>Coefficient</i>	<i>Coefficient</i>	<i>Coefficient</i>	<i>Coefficient</i>
Age code	-5.04989** (2.27049)	0.78851 * (0.45970)	-0.74610 (0.60244)	-0.13738 (0.46138)
Gender code	-.08429 (0.78805)	-0.02659 (0.78182)	-0.75790 (0.54772)	-0.57557 (0.47834)
Duration of Enrollment	-0.33511 (0.46201)	0.70337 (0.50607)	0.21833 (0.38799)	0.71964 ** (0.29010)
Enhanced Academic support	0.26251 (0.32434)	0.50607 (0.43531)	0.39788 (0.28332)	0.50466 (0.33073)
Knowledge of Student Support Office	0.08831 (0.56003)	0.20493 (0.70929)	1.25452 *** (0.47670)	0.68313 (0.51572)
Awareness of where information on Course	0.22744 (0.62974)	-0.08443 (0.57690)	-1.33121*** (0.51570)	0.06196 (0.60391)

Administration is found				
Satisfied with support services to Online learners	-0.02528 (0.42535)	0.09708 (0.72478)	0.30753 (0.33331)	0.68315 * (0.36375)
_cons	14.31831 (4.71491)	-3.29337 (3.23374)	0.47636 (2.03224)	-4.43645 (2.24754)
No of obs=144	No of obs=144 Wald chi2(44) =110.63 Prob > chi2=0.0000 Pseudo R ² =0.2434	No of obs=144 Wald chi2(44) =110.63 Prob > chi2=0.0000 Pseudo R ² =0.2434	No of obs=144 Wald chi2(44) =110.63 Prob > chi2=0.0000 Pseudo R ² =0.2434	No of obs=144 Wald chi2(44) =110.63 Prob > chi2=0.0000 Pseudo R ² =0.2434
1% =*, 5% = **, 10% = ***				

The study found that for students who were dissatisfied with online learning, an increase in awareness of where information on course administration is found by 1 unit is expected to increase their satisfaction in online learning by 0.07082 units (7.08%) holding other factors in the model constant. The study also noted that for students that were already satisfied with online learning, an increase in awareness of where information on course administration is found by 1 unit is expected to increase their satisfaction in online learning by 0.06196 units (6.19%) holding other factors in the model constant.

It was further discovered that for students very dissatisfied with online learning at zetech university, increasing knowledge of a student support office by 1 unit, was expected to increase satisfaction in online learning by 0.08831 (8.83%) holding other variables in the model constant. For students that were dissatisfied, increasing knowledge of a student support office by 1 unit, was expected to increase satisfaction in online learning by 0.20493 (20.49%) holding other variables in the model constant. The study further noted that for students that were very satisfied, increasing knowledge of a student support office by 1 unit, was expected to increase satisfaction in online learning by 0.68313 (6.83%) holding other variables in the model constant. The study indicated that for students that were neither satisfied nor dissatisfied, increasing knowledge of student support office by 1 unit is expected to increase their satisfaction in online learning by 1.25452 units (125.45%) holding other factors in the model constant.

The study also found that for students who were very dissatisfied with online learning, enhancing academic support by 1 unit is expected to increase their satisfaction in online learning by 0.26251 units (26.25%) holding other factors in the model constant. For students who were dissatisfied with online learning, enhancing academic support by 1 unit is expected to increase their satisfaction in online learning by 0.50607 units (50.6%) holding other factors in the model constant. The study further noted that for students that were already satisfied with online learning, enhancing academic support by 1 unit is expected to increase their satisfaction in online learning by 0.50466 units (50.46%) holding other factors in the model constant. The study indicated that for students that were neither satisfied nor dissatisfied with online learning, enhancing academic support by 1 unit is expected to increase their satisfaction in online learning by 0.39788 units (39.78%) holding other factors in the model constant.

V. CONCLUSION

From the study findings, it was evident that there was a strong link between all the independent variables and the dependent variable. The study found that students pursuing an online course prioritize and value information on course administration, a student support office and enhanced academic support. The implication is that if universities ensure that the students are aware of where to find information on course administration, ensure they know that there is a student support office and if academic support is enhanced, then maximum customer satisfaction will be achieved. The study therefore concluded that there is a strong link between online learner support services and university student satisfaction with online learning.

VI. RECOMMENDATIONS

The study revealed awareness of where information on course administration is found, knowledge of a student support office and enhanced academic support as important components of student satisfaction with university online learning. The results offer support for the theorized relationship between awareness of where to find information on course administration, knowledge of a student support office and enhanced academic support and student satisfaction with university online learning.

The management of universities can take into consideration the findings of the study as they describe the link between customer satisfaction levels and service delivery. This information will give insights with regard to student drop out and uncover elements of customer satisfaction with regard to learner support services.

REFERENCES

- [1] Koksai, E., Dost, B., Terzi, Ö., Ustun, Y. B., Özdin, S., & Bilgin, S. (2020). Evaluation of depression and anxiety levels and related factors among operating theatre workers during the novel coronavirus (COVID-19) pandemic. *Journal of Peri Anesthesia Nursing*, 35(5), 472-477.
- [2] Wider, W., Chua, B. S., Mutang, J. A., & Pan, L. C. (2023). *Secondary school students' school-related stressors during the coronavirus disease (COVID-19) pandemic in Sabah, Malaysia*. *Frontiers in Education*, 8, 1138226. <https://doi.org/10.3389/educ.2023.1138226>
- [3] Babolan, A. Z., Kia, M. M., & Derakhshanfard, S. (2016). The role of eLearning in higher education system and its challenges. Paper presented at the In the First International Conference on Modern Research in the Field of Education Sciences and Psychology and Social Studies of Iran, Qom, *International Institute for the Study of Middle East Science*.
- [4] Karupiah, S. M. (2021). Online learning is here to stay new straits times. Retrieved from <https://www.nst.com.my/opinion/letters/2021/04/683668/online-learning-here-stay>
- [5] Allen, I.E., & Seaman, J. (2013). Changing course: Ten years of tracking online education in the United States. *Babson Survey Research Group and Quahog Research Group*
- [6] Moore, M. (1993). Theory of transactional distance. In D. Keegan (Ed.), *Theoretical Principles of Distance Education*. In (pp. 22– 38). London: Routledge.
- [7] Moore, M. G., & Kearsley, G. (1996). *Distance education: A systems view*. New York, NY: Wadsworth.
- [8] Yukselturk, E., & Yildirim, Z. (2008). Investigation of interaction, online support, course structure and flexibility as the contributing factors to students' satisfaction in an online certificate program. *Educational Technology & Society*, 11(4), 51-65.
- [9] Kaminski, K., Switzer, J., & Gloeckner, G. (2009). Workforce readiness: A study of university students' fluency with information technology. *Computers & Education*, 53(2), 228-233.
- [10] Lockman, A. S., & Schirmer, B. R. (2020). Online instruction in higher education: Promising, Research based, and evidence-based practices. *Journal of Education and e-Learning Research*, 7(2), 130-152
- [11] Pei, L., & Wu, H. (2019). *Does online learning work better than offline learning in undergraduate medical education? A systematic review and meta-analysis*. *Medical Education Online*, 24(1), 1666538.
- [12] González-Gómez, D., Jeong, J. S., & Rodríguez, D. A. (2016). Performance and perception in the flipped learning model: An initial approach to evaluate the effectiveness of a new teaching methodology in a general science classroom. *Journal of Science Education and Technology*, 25(3), 450-459
- [13] Abuhassna, H., Al-Rahmi, W. M., Yahya, N., Zakaria, M. A. Z. M., Kosnin, A. M., & Darwish, M. (2020). Development of a new model on utilizing online learning platforms to improve students' academic achievements and satisfaction. *International Journal of Educational Technology in Higher Education*, 17(1), 1-23. <https://doi.org/10.1186/s41239-020-00216>
- [14] Means, B., Toyama, Y., Murphy, R., & Baki, M. (2013). The effectiveness of online and blended learning: A meta-analysis of the empirical literature. *Teachers College Record*, 115(3), 1-47. <https://doi.org/10.1177/016146811311500307>
- [15] Woodley, A., & Simpson, O. (2014). *The elephant in the room*. In *Online Distance Education: Towards a Research Agenda* (pp. 459-485).
- [16] Rotar, O. (2020). A missing element of online HE students' attrition, retention, and success: an analysis through a systematic literature review (Working Paper No. 3). Retrieved from <https://www.lancaster.ac.uk/educational-research/research/centre-for-higher-education-research-and-evaluation/working-papers/>
- [17] Brindley, J. E. (2014). *Learner support in online distance education: Essential and evolving*. In *Zawacki-Richter & A. Terry (Eds.), Online distance education. Towards a research agenda* (pp. 287-310). AU Press
- [18] Gakuu, C.M. & Omondi, B. (2011), *Learner Support Services*, Master in Distance Education, Distance Learning Study Module, University of Nairobi
- [19] Simpson, O., (2013). Student retention in distance education: are we failing our students? *Journal of Open Learning* 28(2):105-119

CONFLICT OF INTEREST STATEMENT

In accordance with my ethical obligation as a researcher, I am reporting that the respondents of this study are students of Zetech University and I am an employee of Zetech University. However, in order to ensure that there is no bias during the data collection process, I have sought authority from the research directorate of the university to conduct the study in Zetech and they will help to ensure ethical procedures in research are followed. This will help to manage any potential conflicts arising from this involvement.