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A Critical Analysis of the role of Student Retention in Accelerating Women's Progressive Education in Kenya. A Case Study of Kiriri Women's University of Science and Technology

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ABSTRACT: *As the world faces multiple crisis and challenges, Universities plays a key role towards establishing a healthier, greener, fairer, and more inclusive societies to provide progressive and quality education for all. Accelerating an inclusive socio-economic recovery starts with education, skills, jobs and growth. The study seeks to analyse the role of student retention in accelerating women's progressive education in Kenya. The study adopted four relevant independent variables which includes: sustainable funding, mentorship, student related challenges, and institutional related challenges. The underpinning theories that support the study independent and dependent variables includes: the women's empowerment framework which supports progressive education and the choice of the case study. John Dewey theory of learning supports progressive education while Tinto's institutional departure model supports students' retention, student related challenges and institutional related challenges. The study adopted mixed method research design and cross-sectional data. mixed research design is a holistic approach that involves discovery of issues through qualitative and quantitative data as well as observation. The study adopted a client-centered approach which focused on students (as the key units of observation) and lecturers. The study target population comprised 408 continuing degree students in their final year, during September – December (2021) semester. This produced a study sample size of 129 students. Students are the main unit of observation in this study. The study also targeted 60 lecturers who were teaching during the same period. This produced a study sample size of 24 lecturers. The study data analysis and interpretation has been done using STATA. The study results reveal that there is statistically significant relationship between the student retention and women's progressive education at 1% level of significance, with a p-value of 0.0000. This is based on the overall results of the model:* $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$ *which explains the goodness of fit with R-Squared = 90 per cent, the R-squared = 89 per cent, F-statistic = 160.69. and a p-value = 0.0000. This implies that the model explains* ***89%*** *of changes in women's progressive education. The study indicators: sustainable funding, mentorship, student related challenges and institutional related challenges explains 89 per cent change in women's progressive education. The study recommended more focus student retention to enhance women's progressive education and institutional sustainability. The study further recommends more focus on sustainable funding to enhance students' retention and progression. There is need to implement mentorship programmes to enhance retention and employability. Institutional related challenges can be addressed through transformative, inclusive and thought leadership. In addition, there is need to address students related challenges through encouraging meaningful engagements through students' affairs services, counselling and guidance.*

KEYWORDS: students'-retention, women's-progressive education, sustainable-funding, mentorship, human capital.

INTRODUCTION

Students' retention is one of the major issues for higher education globally, although different situations depend on national, regional and global context. Most institutions have to an extent recognized the role of student's affairs services in enhancing students' retention and transforming the lives and living environments of learners in higher learning institutions (Schreiber and Encinas, 2020). Progressive education is one of the key strategies that accelerates women's education and promote holistic education, which is a key element of human capital development. The main objective of the university education is to promote advancement of the knowledge through teaching, scholarly research and scientific investigation and promotion of gender balance and equality of opportunity among students and employees (Laws of Kenya, 2012).

Progressive education is believed to have found its expression through various separate societies such as labour unions and women global movements. The labour unions raised concerns that progressivism was to address the quality of life. In the 19th Century a series of reforms movements of progressivism gained and made an impact on education, politics, culture, journalism, and social services in the United States (Miquon, 2021).

Hopkins (2017) described progressive education using Dewey's views. Dewey stated that students are more likely to develop a love of education and become a lifelong learner when different approaches are integrated. Dewey further stated that students can apply critical thinking skills and outside the classroom as they evaluate and re-evaluate their perspectives on real world topics and issues, and also thinking out of the box.

Globally access to education has risen and the existing data from UNESCO Institute of data as reported by McGregor in 2020. McGregor (2020), indicated that world enrollment rate was 19% in 2000 and had double to 38% by 2018. The report indicated that North America had the highest tertiary enrolment rate at 86% in 2018, followed by Europe and Central Asia at 70% and Central Europe and the Baltics at 62%. Regionally, South Africa, where nearly had of all university students drop out, is a country with a major focus on students' retention and success even though it has only 22% participation rate (McGregor, 2020).

Locally, access to quality education has risen, however, Kenyan universities are facing numerous challenges from lower state funding, reduced enrolment of self-sponsored students and unresolved institutional management issues. Students' attrition rate is also a major concern (Njoroge, Wang'eri and Gichure, 2016). A study conducted by Njoroge *et al*., in 2016 established students' attrition rate of 37% in private universities in Nairobi County. In response to the above challenges, the Government of Kenya intends to review institutional funding (Nganga, 2022). The issue of inadequate state funding is evident in the reduced number of Government Sponsored Students (GSS) in most institutions.

For instance, at Kiriri Women's University of Science and Technology, the number of Government Sponsored Student's (GSS) enrollment trend reduced by 8 per cent between 2019/20 and 2020/21 academic year. During 2018/19 and 2019/20 academic year, Government degree sponsored students reduced by 26 per cent. The reduction in number of GSS is attributed to the

structural challenges faced by higher learning institutions and the negative ripple effects of COVID 19 pandemic (KNBS, 2021).

Statement of the problem

As the world faces multiple crisis and challenges, Universities plays a key role towards establishing a healthier, greener, fairer, and more inclusive societies to provide progressive and quality education for all. Despite the focused attention on various teaching methods, career development and students' welfare programmes, student's retention ability continues to be one of the greatest challenges that educators face (Leeds, Campbell, Baker, and Ali, 2015).

The retention of students in higher education programs has been an area of interest to many institutions, educationists, and instructors in general. Crosling (2017) stated that students withdrawing from their studies before completion of their studies is costly to the higher education systems, to the students and to the society as a whole. In 2015 a report by European Commission titled, *Drop out and Completion in Higher Education in Europe,* pointed out that reducing dropout and increasing completion rates were key to towards achieving their Europe (2020) goal of having at least 40% of 30 to 34 years old's with completed higher education (McGregor, 2020).

Kenyan universities are facing numerous challenges from lower state funding, reduced enrolment of self-sponsored students and unresolved institutional management issues (Nganga, 2022). This is evident in the reduced number of Government Sponsored Students (GSS) in most institutions. For instance, at Kiriri Women's University of Science and Technology, the number of Government Sponsored Student's (GSS) enrollment trend reduced by 8 per cent between 2019/20 and 2020/21 academic year. During 2018/19 and 2019/20 academic year, Government degree sponsored students reduced by 26 per cent (KNBS, 2021). The study, therefore, sought to establish a critical analysis of the role of student retention in accelerating women's progressive education in Kenya.

Specific Objective of the study

The study sought to establish the role of student retention in accelerating women's progressive education in Kenya?

Research Question

How does student retention accelerate women's progressive education in Kenya?

LITERATURE REVIEW

Theoretical Review

Tinto's Longitudinal Model of Student's Departure

A longitudinal model of student's departure was formulated by Vincent Tinto in 1987 in his book "*Leaving College: Rethinking the Cause and Cures of Students Attrition".* Tinto formulated the theory due to students protest in 1960's and 1970's in United States. Those protests sought to shed light on the role of existing social, political and economic structures in perpetuating racial and economic inequality in American society. In exploring the student's departure model, Tinto sought

to find a way of explaining dropout by linking students' actions, staying or leaving to the actions of the institutions which students enroll (Tinto, 2019).

The theory argues that student's decision to stay or leave a college/university reflect a cumulative impact of student's experiences in the formal and informal academic and social systems of the college/university on their academics and social integration, achieving their goals and commitments. Tinto further explained that the decision to stay or leave is shaped in a number of important ways by the character of student's goals. For example, many students enroll in colleges and universities to acquire knowledge so as to improve their skills in order to get a job and advance in their occupation. However, it is important to note that students differ in their opinion, and that motivation and persistence determines their acceleration and success (Tinto, 2019).

Tinto (1987) discussed the dimensions and consequences of college student attrition and features of institutional actions to deal with students' attrition. The theory proposes that student's departure may serve as a barometer of social and intellectual health of college and university students' life as much as of the students experience at the institution. The model justifies that the more the commitment of students to college, the greater their retention and achievement (Kahu & Nelson, 2018; Tinto, 2019). Figure 2.1 shows the Tinto's Longitudinal Model of Student's Departure.

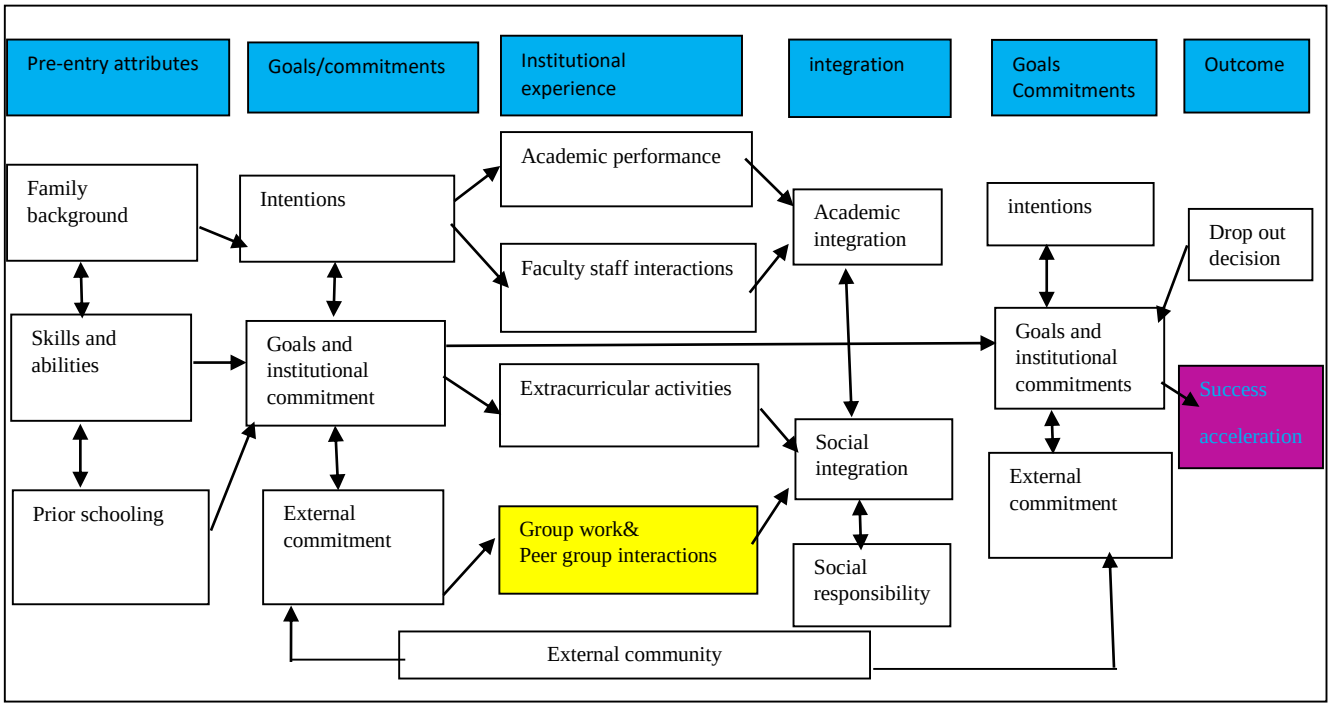


Figure 2.1: Tinto's Longitudinal Model of Student's Departure adapted from Tinto (2019).

The Women's Empowerment Framework

The women's empowerment framework was developed by Sara Hlupekile Longwe, a gender expert from Lusaka, Zambia in 1995. Longwe argued that women's poverty is the consequence of oppression and exploitation rather than lack of productivity, and that to reduce poverty women must be educated and empowered (Leder 2016). The framework postulates five progressively

greater levels of equality that can be achieved, listed from the highest to the lowest as shown in Table 2.1.

First is control – equal control over in decision-making over factors of production; Second is participation – equal participation in decision-making processes related to policymaking, planning and administration; third is conscientization – attaining equal understanding of gender roles and a gender division of labor that is fair and agreeable; fourth is access – equal access to factors of production by removing discriminatory provisions in the laws and fifth is welfare – having equal access to material welfare (food, income, medical care) (Leder, 2016).

Table 2.1 The Women's empowerment framework

Level of empowerment	Description
Control	Women and men have equal control over factors of production such as land, labour, capital and entrepreneurship), and distribution of benefits without dominance or subordination
Participation	Women have equal participation in decision-making in all programs and polities
Conscientization	Women believe that gender roles can be changed and gender equality is possible
Access	Women gain access to resources such as land, labour, credit facilities, education, training, marketing facilities, public services and benefits on an equal basis with men. Reforms of law and practice may be prerequisites for such access.
Welfare	Women's material needs such as food, education, income and medical care are met

Source: Leder(2016)

Leder (2016) argued that empowerment is a term widely used by academicians, policy makers and development worker, which has resulted in a vague and contested nature of the terms' conceptualization and methodology. Leder further explained that the term or philosophy of empowerment was developed through Brazilian educationist Paulo Freire (1921-1997). Leder developed the pedagogy of the oppressed in 1970 to empower the oppressed to resolve the contradiction to the oppressors, those in power. Freire's approach led to an influential social and educational movement and literacy program to create empowerment through consciousness.

John Dewey Theory of Learning

According to Lee and Oh (2019), Dewey formulated John Dewey theory of learning in 1916. Dewey argued that there is need for education to be more pragmatic and democratic. In 1956, the curriculum harnessed by Dewey consisted of three elements which includes: *knowledge, intellect and recreation*. In formal education Dewey's philosophy of progressive education has the potential to extend to cultural and art education. In this context, the researchers, Theuri, Waitherero and Nyabul (2020), simply defined, progressive education as a school of thought that emphasizes the need to learn by doing (hands-on learning).

Dewey felt that "hands-on" learning, which involved offering direct practical experience in the operation or functioning of anything, helped learners learn much better. Dewey in 1916, formulated the theory of progressive education due to the challenges that arose from dissatisfaction with traditional education, which imposed adult norms, subject matter, and methodology only. Dewey assumed that all parties are equal and share the main aim to create a social consciousness amongst learners (Lee and Oh, 2019).

Using Dewey's approach, we see the need to re-model our education systems as described in Dewey's framework. Dewey's framework is a key aspect that drives the study dependent variable is the pragmatic philosophy, therefore, the study adopts John Dewey's Theory of Learning to support the dependent variable as presented in Figure 2.2

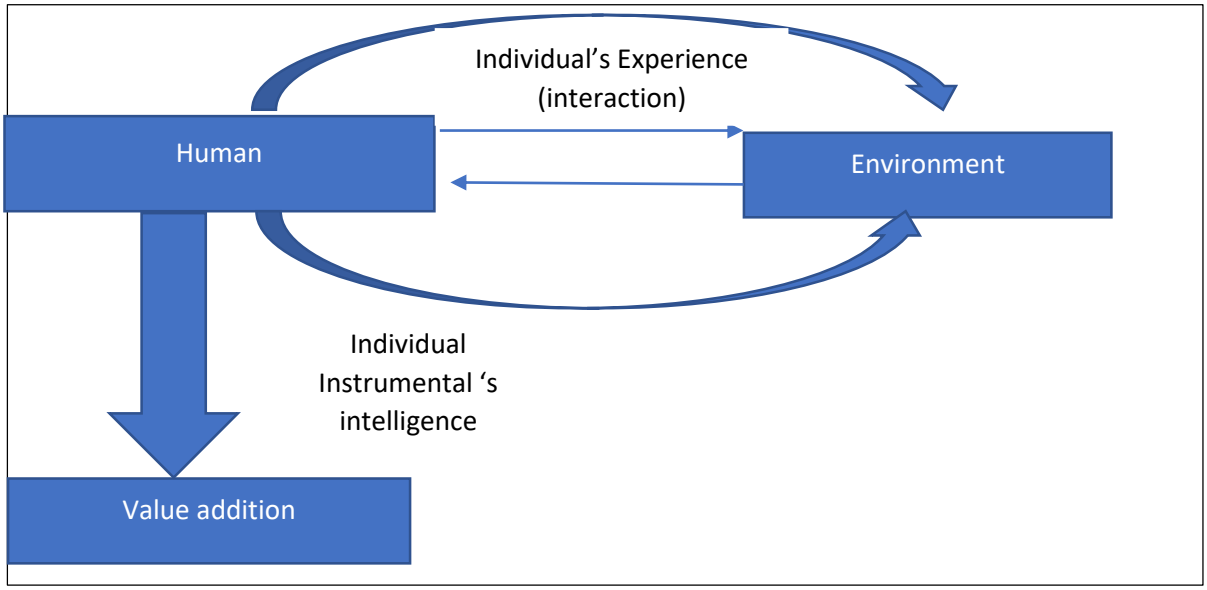


Figure 2.2: Framework of John Dewey's philosophy of progressive education adopted from Lee and Oh (2019).

EMPERICAL REVIEW

Students' Retention

Allaf (2020) carried out a study to determine women's perspectives on retention in higher education in Jordan: commute and choice. The study explored the experience of 18 women from 2008 to 2009 in their final year of study, 10 women newly enrolled students. The participants were drawn from 7 public universities and 6 private universities. Interviews were concluded and qualitative research approaches were adopted to obtain holistic results. The study found that retention is influenced by individual level characteristics rather than institutional level. The study concluded that more attention should be paid to the role of commute and the inflexibility of higher education admissions process.

Katy, Stephanie, Albert and Jokina (2021) conducted a study to examine online retention research in higher education over a 5-year span (January 2015 – March 2019 to further advance research in higher education retention. The study adopted a desk review approach, which secondary data

was reviewed. The data reviewed suggest the most common retention issues or strategies involved student factors/motivation as well as faculty and student interactions. The study concluded that common retention strategies most often includes enhancing faculty training and/or support and adding student services positions and/or support.

Leeds *et al.,* (2015) carried out a study to investigate the impact of student retention strategies on retention rates in an online information systems course. A treatment group exposed to retention strategies related to student engagement, learning communities, student services and learner centered environments was compared with a control group. The results showed that retention strategies may not impact retention rates.

Women's Progressive Education

Renn(2015) conducted a study to determine the roles of women's higher education institutions in international context. The study examined the contribution of these institutions to their national systems of education and society. The study adopted a qualitative comparative, multiple case study approach to understand ad 14 diverse women's colleges and universities in nine nations on five continents. The study recommends four key roles, which includes: gender empowerment, leadership development and cultural paradox.

Julia (undated) conducted a study to analyse the factors that mitigate against women's participation in institutions of higher learning in Tanzania. The study adopted both primary and secondary data. Quantitative and qualitative techniques of data analysis was adopted. The study found that women face challenges in career development, lack of confidence and low enrollment rates. The study recommends, gender sensitization to management and senior officials, counselling for confidence building, remedial courses to raise current female enrollment and outreach programmes to upscale motivational programmes, confidence building and role modeling. Within the organizations, the researcher recommended, gender sensitive appraisal systems and friendly work environment.

CONCEPTUAL FRAMEWORK

Students Retention

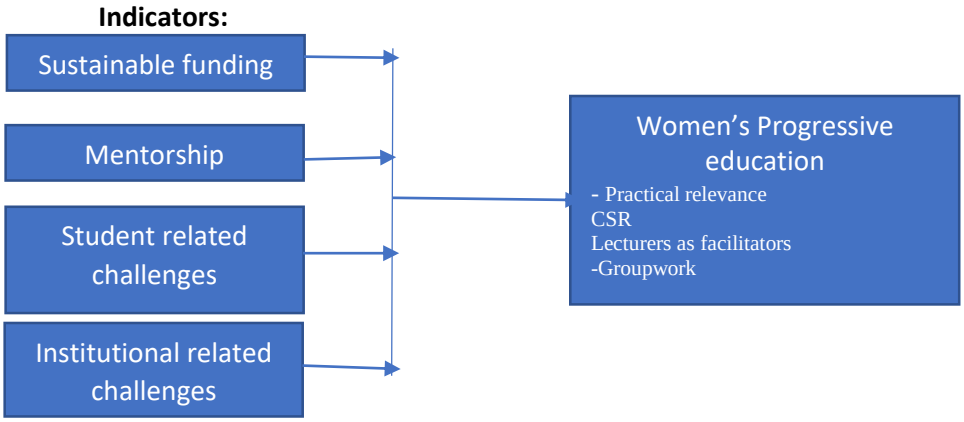


Figure 2.1 Conceptual framework

METHODOLOGY

The study adopted mixed method research design strengthened with pragmatism and constructivism as the appropriate research paradigm. The mixed method research design has been adopted since it is a holistic approach that involves discovery of issues through qualitative and quantitative data. The study focused on students as the key unit of observation, and lecturers since the researcher adopted a client and a learner-centered approach using a cross-sectional data.

The study unit of analysis is KWUST. The study target population comprised 408 continuing degree students in their final year, during September – December (2021) semester (KWUST workload, 2021). This produced a study sample size of 129 students. The study also targeted 60 lecturers who were teaching during the same period. This produced a study sample size of 24 lecturers as shown in the following computation: A pilot test of 10% of the sample size was conducted and validity of the data collection instruments was established through researcher's expert opinion. The reliability results were all above 0.7. This implies that all the indicators correlate highly among themselves.

Calculation of sample size of the students to be interviewed.

The target population is 408 students. The estimate is within 2 per cent of the true value with 95 per cent confidence level. In this case, e(error margin) in this case is 0.02; level of significance is 0.05 %; Z-tabulated value is 1.96.

N = 408

e = .02 (since the estimate should be within 2% of true value);

z = 1.96 (as per table of area under normal curve for the given confidence level of 95%).

Assume p to be p = .02

$$\frac{(\mathbf{1.96})^2(\mathbf{0.02})(\mathbf{1-0.02})(\mathbf{408})}{(\mathbf{0.02})^2(\mathbf{408-1})+(\mathbf{1.96})^2(\mathbf{0.02})(\mathbf{1-0.02})} = \mathbf{129} \text{ students} \quad \ldots\ldots 3.1$$

$$\frac{(\mathbf{1.96})^2(\mathbf{0.02})(\mathbf{1-0.02})(\mathbf{60})}{(\mathbf{0.02})^2(\mathbf{60-1})+(\mathbf{1.96})^2(\mathbf{0.02})(\mathbf{1-0.02})} = 26 \text{ lectures} \quad \ldots\ldots 3.2$$

The study adopted triangulation in sampling design, where stratified sampling, purposive and simple random sampling was conducted. This is in line with the adoption of mixed research design. Equal representation of the study population has been taken into consideration.

Table 3.1 Sampling frame

The students are the key units of observation in this study.

Type of Respondents	Target population	Sample size
a) Lecturers	60	26
b) Students	408	129

FINDINGS, ANALYSIS AND DISCUSSIONS

Response Rate

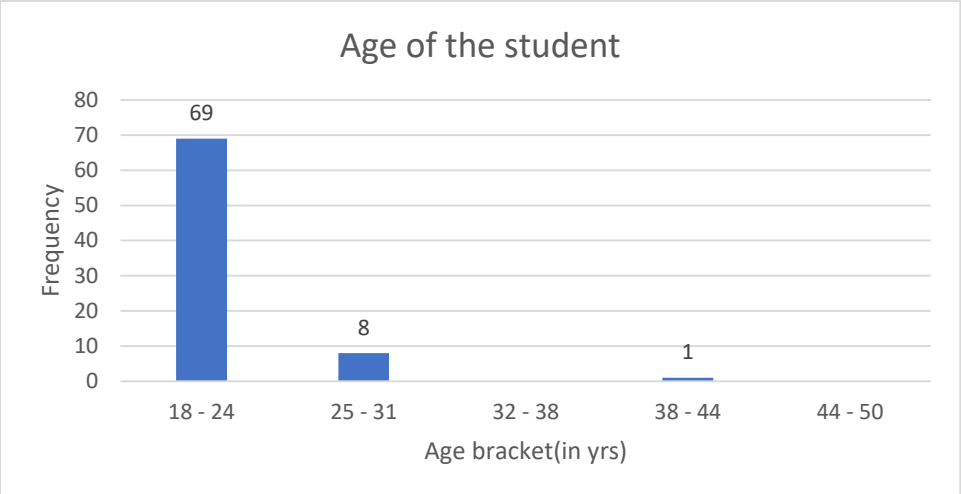
The study attained response rate of 81(63%) among students and 24(92%) among the lecturers interviewed. The study response rate attained is adequate. The findings concur with the recommendation of American Association for Public Opinion Research (AAPOR) report of 2015, which stated that the average and also reasonably acceptable response rate is 60% ±20 that can be used to generalize the characteristics of the study problem as expressed by opinions of the respondents in target populations. (Odhong, 2018).

The study adopted appropriate measures to obtain a significant response rate, by ensuring familiarity with the organization and identifying the right target population before the data collection. The researcher also considered extending the data collection period to January – April (2022) semester to provide the respondents and the researcher with sufficient time and to increase the response rate. The choice of the period study concurs with that of Katy, *et al.*, (2021) who conducted a study to examine online retention research in higher education between (January 2015 – March 2019).

DEMOGRAPHIC STATISTICS

Age bracket

The study results shows that 69(88.46%) of the students are aged between 18 – 24 years, 8(10.26%) of the students aged between 25 – 31 years and only one (1%), is aged between 32 – 44 years. The above data implies that KWUST attract young female students who have accelerated fairly well from primary to secondary school to university level. The graph below shows the students age bracket.

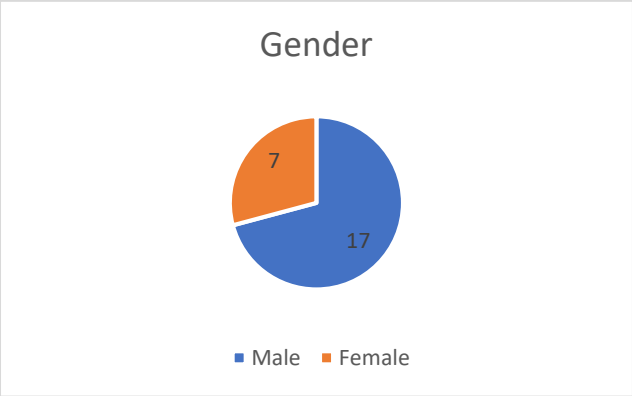


In addition, the study results further revealed that 9(37.5%) of the lecturers are aged between 18 – 35 years, 13(54.17%) aged between 36 – 53 and 2(8.33%) are aged between 54 – 70 years. The results reveal that only nine of the lecturers are classified as youth as defined by Kenya's

Constitution while majority are of working age. Overall, the data shows that all lecturers fall within the productive age.

Gender

The study focused on KWUST, hence all the students who respondents are female. In addition, the study results shows that 7(29.17%) are female lecturers while 17(70.83%) are male lectures. This implies gender imbalance among the teaching staff at KWUST.



Level of education and progress

Study findings reveal that only 5 students out of 81 observations, accelerated from certificate course to the degree program. This translates to **5(6%)** of the students interviewed. This implies that minimal number of students who were enrolled during the period had accelerated from certificate level courses to degree level course. In addition, the study findings revealed that **54(66.7%)** an impressive enrolment and acceleration of students from diploma programmes to degree programmes. This implies that most diploma students join degree programme at KWUST.

In addition, the study results also revealed that out of 24 lecturers who responded to the study, 14(58.33%) are holders of master degrees in their areas of specialization, 8(33.33%) are holders of doctorate degrees in their areas of specialization while only 2(8.33%) of the teaching staff are first degree holders.

DESCRIPTIVE STATISTICS

In your view, how does student retention accelerate women's progressive education at KWUST?

Majority, 21(43.8%) of the students stated that students career guidance and counseling, strengthened with mentorship is key in accelerating women's progressive education. This was supported by 4(25%) of the lecturers interviewed, who indicated that students career guidance and counselling is key in enhancing student retention. The lecturers further explained that this will help in addressing students related challenges.

The study findings revealed that 14(29.17%) indicated that student retentions enhance students' enrolment and boost their morale to continue from certificate to degree level. This was supported

by majority 6(37.5%) of the lecturers who gave their views on this question, stated that increase in completion rates enhances students' retention rates. In their view, this eventually enable them become highly empowered women in the society.

The study findings also reveals that 8(16.67%), indicated that student retention increases completion rate. In addition, 5(10.42%) indicated that students retention enhances skills development. This concurs with views of 4(25%) of the lecturers who responded to the study indicated that student retention enhances student enrolment and skills development.

Suggest the various student retention strategies that can be adopted to accelerate women's progressive education at KWUST.

Study findings shows that 54 students out of 81 observations gave their views in this question. Where, majority 28(45.46%) suggested that students career guidance and counseling, strengthened with mentorship as well as job placement support, highly accelerate students' retention. Data also revealed that 17(31.48%) indicated that affordable fees and scholarship as well as sustainable funding accelerates students' retention. While 3(5.55%) indicated that students' progress monitoring through semester check-ins and sensitization workshops for students plays a key role in enhancing students' retention. Additional findings are presented in Table 4.1 below:

Table 4.1: Students' Retention Strategies

	Suggestions	Frequency	Percentage
1	Career guidance and counselling, strengthened with mentorship as well as job placement can accelerate student retention	28	51.85
2	Affordable fee and scholarship as well as sustainable funding	17	31.48%
3	Student progress monitoring through semester check-ins and professional programs as well as sensitization workshops for students.	3	5.55%
4	Provision of basic needs to women and girls and ensuring access to information and quality education	3	5.55%
5	Quality education and maintaining quality standards	3	5.55%

INFERENTIAL STATISTICS

The regression result of the role of student's retention in accelerating women's progressive education in Kenya.

The study adopted multiple regression model in the analysis. In the study the women's progressive education was regressed against four variables; sustainable funding, mentorship, student related challenges and institutional related challenges. The study results revealed existing relationship and statistical significance with varied p-values as shown in Appendix 2 and 3 respectively.

Overall Multiple Regression Results

Based on the regression results of the data obtained from students, the study findings reveal that R-Squared is 0.90, the Adjusted R-squared is 0.89, F-statistic of 160.69 and a p-value of 0.0000. This implies that the model explains 89% of changes in women's progressive education. This

means that sustainable funding, mentorship, student related challenges and institutional related challenges explains 89 per cent change in women's progressive education. The study results also shows that there is statistically significant relationship between the study independent and dependent variables at 1% level of significance, with a p-value of 0.0000. Based on the results the model: $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$ explains the goodness of fit with R-Squared = 90 per cent, the R-squared = 89 per cent, F-statistic = 160.69. and a p-value = 0.0000. Regression results are presented in Appendix 3.

The regression result above concurs with data obtained from lecturers. The study findings reveal that Adjusted R-Squared is 83 per cent, the R-squared is 86 per cent, F-statistic of 28.28 and a p-value of 0.0000. This implies that the model explains 83% of changes in women's progressive education. This means that sustainable funding, mentorship, student related challenges and institutional related challenges explains 83 per cent change in women's progressive education. The study results also shows that there is statistically significant relationship between the study independent and dependent variables at 1% level of significance, with a p-value of 0.0000. therefore, based on the results, the model explains the goodness of fit with R-Squared = 83 per cent, the R-squared = 86 per cent, F-statistic = 28.28 and a p-value = 0.0000. Regression results are presented in Appendix 2.

Sustainable funding and women's progressive education`

The regression results presented in Appendix 3 shows that there is a positive and statistically significant relationship between sustainable funding and women's progressive education with the regression coefficient of 0.259, t-value of 6.96, and p-value of 0.000. The estimation results imply that the coefficient of sustainable funding is statistically significant at 1 per cent level of significance.

The magnitude of the coefficient of sustainable funding is 0.259. This implies that, *ceteris paribus*, one unit change in the score of sustainable funding leads to 0.259 units change in the score of women's progressive education in Kenya. The study results is a reflection of the UN recommendation on a country's budget to be spend on education. According to the report released by ActionAid in 2020, in *financing the future: delivering SDG 4 in Kenya,* Kenya already spends significantly on education and comes very close to this target by spending about 22% in university education by 2018. To finance SDG 4, the UN recommends that at least 15-20% of the budget should be spent on education, or 4 – 6% of the country's GDP.

The regression results of the data obtained from lecturers as presented in Appendix 2 shows that there is a positive and statistically significant relationship between sustainable funding and women's progressive education with the regression coefficient of 0.175, t-value of 1.39, and p-value of 0.181. The estimation results imply that the coefficient of sustainable funding is statistically significant at 5 per cent level of significance. The magnitude of the coefficient of sustainable funding is 0.175. This implies that, ceteris paribus, one unit change in the score of sustainable funding leads to 0.175 units change in the score of women's progressive education in Kenya.

Mentorship and women's progressive education

The regression results presented in Appendix 3 shows that there is a positive and statistically significant relationship between mentorship and women's progressive education with a regression coefficient of 0.251, t-value of 6.82, and p-value of 0.000. The estimation results imply that the coefficient of mentorship is statistically significant at 1 per cent level of significance. The magnitude of the coefficient of mentorship is 0.251. This implies that, *ceteris paribus*, one unit change in the score of mentorship leads to 0.251 units change in the score of women's progressive education in Kenya. Mentorships offers great help to learners! A survey conducted in 2020 by UGA Mentor program which was implemented by University of Georgia found that 97 % of mentees indicated gaining appreciation for being mentored in personal and professional development, 96% of mentors found it meaningful opportunity and 98% of the participants would recommend a mentorship program.

The regression results of the data obtained from lecturers as presented in Appendix 2 shows that there is a positive and statistically significant relationship between mentorship and women's progressive education with a regression coefficient of 0.245, t-value of 3.17, and p-value of 0.005. The estimation results imply that the coefficient of mentorship is statistically significant at 1 per cent level of significance. The magnitude of the coefficient of mentorship is 0.245. This implies that, *ceteris paribus*, one unit change in the score of mentorship leads to 0.245 units change in the score of women's progressive education in Kenya.

Institutional related challenges and women's progressive education lecturers

The regression results presented in Appendix 3 shows that there is a positive and statistically significant relationship between institutional related challenges and women's progressive education with a regression coefficient of 0.246, t-value of 8.84, and p-value of 0.000. The estimation results imply that the coefficient of institutional related challenges is statistically significant at 1 per cent level of significance. The magnitude of the coefficient of institutional related challenges is 0.246.

This implies that, *ceteris paribus*, one unit change in the score of institutional related challenges leads to 0.246 units change in the score of women's progressive education in Kenya. Th study finding concurs with that of Katy, *et al.*, (2021) who conducted a study to examine online retention research in higher education over a 5-year span (January 2015 – March 2019 to further advance research in higher education retention. The study concluded that common retention strategies most often includes enhancing faculty training and/or support (institutional capacity building) and adding student services positions and/or support.

The above findings is also supported by regression results of the data obtained from lecturers as presented in Appendix 2 shows that there is a positive and statistically significant relationship between institutional related challenges and women's progressive education with a regression coefficient of 0.226, t-value of 3.04, and p-value of 0.07. The estimation results imply that the coefficient of institutional related challenges is statistically significant at 1 per cent level of significance. The magnitude of the coefficient of institutional related challenges is 0.226. This implies that, *ceteris paribus*, one unit change in the score of institutional related challenges leads to 0.226 units change in the score of women's progressive education in Kenya.

Student related challenges and women's progressive education

The regression results presented in Appendix 3 shows that there is a positive and statistically significant relationship between students related challenges and women's progressive education with a regression coefficient of 0.173, t-value of 3.68, and p-value of 0.000. The estimation results imply that the coefficient of students related challenges is statistically significant at 1 per cent level of significance. The magnitude of the coefficient of students related challenges is 0.173.

This implies that, *ceteris paribus*, one unit change in the score of student related challenges leads to 0.173 units change in the score of women's progressive education in Kenya. The study findings concur with that of Allaf (2020), who carried out a study to determine women's perspectives on retention in higher education in Jordan: commute and choice. The study found that student's retention is influenced by individual level characteristics rather than institutional level. The discussion is attributed to the low regression result of 17% change in women's progressive education.

The regression results also concur with the result of the data obtained from lecturers as presented in Appendix 2 shows that there is a positive and statistically significant relationship between students related challenges and women's progressive education with a regression coefficient of 0.299, t-value of 2.64, and p-value of 0.016. The estimation results imply that the coefficient of students related challenges is statistically significant at 5 per cent level of significance. The magnitude of the coefficient of students related challenges is 0.299. This implies that, *ceteris paribus*, one unit change in the score of student related challenges leads to 0.299 units change in the score of women's progressive education in Kenya. Based on the findings, both respondents indicated that addressing students related challenges is statistically significant at one percent level of significance.

SUMMARY OF THE FINDINGS

Based on the regression results of the data obtained from students, the study findings reveal that R-Squared is 0.90, the Adjusted R-squared is 0.89, F-statistic of 160.69 and a p-value of 0.0000. This implies that the model explains 89% of changes in women's progressive education. This means that sustainable funding, mentorship, student related challenges and institutional related challenges explains 89 per cent change in women's progressive education. The study results also shows that there is statistically significant relationship between the study independent and dependent variables at 1% level of significance, with a p-value of 0.0000.

According to students who participated in this study, sustainable funding accelerates women's progressive education by **26%.** However, data obtained from lecturers shows that sustainable students funding contributes to 17% increase in women's progressive education. There is a slight variation in the magnitude of their views but they all agree that there is need for sustainable students funding. The results obtained implies that availability of funds/fees promotes students' retention and accelerate women's progressive education.

The study fundings shows that mentorship leads to **25%** change in women's progressive education. Hence, mentorship accelerates women's progressive education by 25%. This concurs with the results obtained from lecturers which indicates that mentorship leads to 24% change in

women's progressive education. The results obtained implies that mentorship is a key tool that promotes students' retention, enhances skills and career development.

The study findings reveal that addressing institutional related challenges can accelerate women's progressive education at **25%.** This concurs with the views of the lecturers who participated in the study who stated that addressing institutional related challenges accelerates women's progressive education by 23%. The study results reveals that institutional related challenges affect students' retention and acceleration.

The study findings reveal that addressing students related challenges can accelerate women's progressive education by **17%.** However, according to the lecturers who participated in the study, addressing students related challenges accelerates women's progressive education by 30%. The results obtained implies that the student's personal issues affect their retention and acceleration in education.

IMPLICATION TO RESEARCH, POLICY AND PRACTICE

Higher learning institutions must now adopt turnaround strategies and policies that will enhance student retention, accelerate progressive education and increase revenue. For instance, to address funding issues, institutions should encourage internal and external resource mobilizations to support the learners through research. Second, mentorship programmes should be implemented in all institutions. The study results implies that lecturers must now go beyond teaching or supervision and support students through mentorship. Mentorship is not '*a rocket science'* it is that simple advice, guidance, and support that one may offer to the mentee. Third, the institutional related challenges should be addressed through bold, transformative, inclusive and thought leadership approaches, coupled with solid human capital management policies and best practices.

Finally, in addressing student related challenges, the policies adopted should be gender responsive, client and learner-centred. The interventions and programmes implemented within the institutions should be evidence based and tailored to address the learners needs. A more inclusive approach is needed to accommodate students with special needs. *Creche*' facilities such as paid or subsidized child care programmes are now important than ever, to support young women as they grow in their career. In addition, empowering and motivational text messages sent on a weekly basis can enhance students' engagement and motivation.

CONCLUSION AND RECOMMENDATIONS

In conclusion it is important to enhance student retention. Higher learning institutions should focus on: First, sustainable funding, second is mentorship, third is addressing institutional related challenges and last, addressing students related challenges. The study findings shows that sustainable funding is the overall variable that should be addressed first. The recommendations in this study have been provided as per the study independent variables and specific objectives.

First, the study revealed that sustainable funding is the main instruments that enhances student's retention in higher learning institutions. Students needs government funding, affordable fee and scholarship to support them throughout their learning period. Moreover, funding women's

education and empowerment is essential for sustainable development. In 2015, world leaders committed to achieving Sustainable Development Goal 4 and 5, and to deliver equitable, inclusive and quality education. Hence, the Government should spend at least 20% of its budget on university education in accordance with the UN recommendation.

Second, mentorship as a key tool in enhancing students' retention and ensuring acceleration in progressive education. Mentor students so as to gain employability edge and that mentorship is now important than ever. Students appreciates the ongoing mentorship program at KWUST, hence higher learning institutions should implement mentorships. Enable students to cultivate impactful mentorship relationships with their mentors, lecturers and advisors, and set up your students for success in the dynamic labour market. Institutions can adopt integrated approaches such as: one-on-one approach – to assist students on session, group mentorship approach and virtual support systems approach. The study recommends that all institutions should have a formal mentorship.

Third, addressing institutional related challenges was also stated as a key issue in ensuring students retention. Hence, higher learning institutions should focus on programmes that addresses industry and societal problems. Students' retention enhances skills development hence there's need to engage a skilled and competent lecturer to enhance their retention. In this regard, institutions have the responsibility to acquire more cross-border knowledge and skills so as to produce students who are *competent and beyond borders*. We have to remind ourselves that "*labour market is a global village*" The University should find ways of increasing enrolment and ensuring progression of the students from certificate (more specifically) and diploma level to accelerate to degree.

Institutions can also embrace performance related incentives for students and lecturers. Monitor attendance and study progress to identity the students at risk or the students experiencing challenges and provide the necessary support such as counselling, mentorship and coaching. This can be achieved through increased university responsibility and commitment to study success and use of success-related indicators to motivate the learners. The study also recommends promoting Students Affairs Services (SAS) to advance social justice by promoting favourable conditions for students' equitable opportunities to access, live happily, learn and increase students' participation at higher education institutions.

Lastly, addressing students related challenges is key and promotes students' retention in higher learning institutions. Hence, institutions should focus on continuous career guidance and counselling, strengthened with mentorship as well as job placement to accelerate women's progressive education. In addressing students related challenges, engage and partner with parents. Some institutions have done this through online institutional portal engagements that keeps parents abreast of the progress of the learners.

REFERENCES

ActionAid (2020). *Kenya Fact Sheet: Financing the Future: Delivering SDG 4 in Kenya*. Available at https://actionaid.org

Allaf, C. (2020). Women's Perspectives on Retention in Higher Education in Jordan: Commute and choice. *Journal of College Student Retention Research Theory and Proactive. Volume 14 (1): 67 – 89.* DOI:10.2190/CS.14.1.d

Crosling, G. (2017). *Student Retention in Higher Education*, A Shared Issue. In the book: Encyclopedia of International Higher Education Systems and Institutions (pp. 1 – 6)

Hopkins, E. A. (2017) John Dewy and Progressive Education, *The Journal of Educational Thought* (JET)/Revee dela pensée educative Vol. 50, No. 1, pp. 59 – 68(10**).**

Kahurani, Z. (2020). *Teen Pregnancy in Kenya: Verifying the Data and the Facts*. African Institute for Development Policy (AFIDEP), Kenya and Malawi. Available at https://www.afidep.org.

Katy, S., Stephanice, H., Albert, B. and Jokina, H. (2021). *Retention Strategies for Online Students: A Systematic Literature Review*. DOI.105038/2577 – 509X5.1.1105.

Laws of Kenya (2012). *Universities Act No. 42 of 2012,* The Republic of Kenya

Leder, S. (2016). *Linking Women's Empowerment and Resilience*. Literature Review, Swedish University of Agricultural Science.

Lee, S. J. & Oh, J. (2019). *Modeling Cultural Content for Outreach Programs in Marginalized Communities in Asia.* A Case Study of South Korea. Canadian Center of Science and Education, Higher Education Studies, Vol. 9. No. 2

Leeds, E. M., Campbell, S. M., Baker, H. M. and Ali, R. (2015). The Impact of Student Retention Strategies: An Empirical Study. *International Journal of Management in Education. Vol. 7 (1/2) 22 – 43*. DOI:10:1504/IJMIE.

McGregor, K. (2020). *Access, Retention and Students' Success – A World of Difference,* University World News. Available at https://www.universityworldnews.com.

Miquon (2021). *Miquon Provides A Progressive Educational Program for Children Ages 3-12*. Available at miquan.org**.**

Nawe, J. (undated). *Female Participation in African Universities:* Effective Strategies for Enhancing Their Participation with Reference to The University of Dar es Salaam, Tanzania.

Njoroge, M. M., Wngeri, T. and Gichure, C. (2016). Examination Repeats, Semester Deferments and Dropping out as Contributors of Attrition Rates in Private Universities in Nairobi, Kenya. *International Journal of Education and Research Vol. 4 No. 2.*

Odhong, E. (2021). Harnessing Human Capital through Universal Social Protection in Kenya. *Global Journal of Human Resource Management*, Vol.9, No.3, pp.37-57,

Odhong, E. A. (2018). *Influence of Human Capital Practices on Employee Performance in the Private Security Industry in Kenya*. A published thesis submitted in Partial Fulfillment for the Degree of Doctor of Philosophy in Human Resource Management in the Jomo Kenyatta University of Agriculture and Technology, Nairobi, Kenya.

Renn, A. K. (2015). Colleges and Universities on their own: Women's Higher Education Worldwide *Vol. 18 No. 2. Association of American Colleges and Universities*

Schreiber, B. and Encinas, A., P. (2020). *Student affairs and services must not lose sight of transformation.* University World News. Available at https://www.universityworldnews.com.

Theuri, J. M., Waitherero, N. and Nyabul, P. (2020). John Dewey's Theory of Progressive Education, *African Research Journal of Education and Social Science*, 7 (2) ISSN, (online: 2312 – 0134.

Tinto, V. (2019). *A Theory of Student Retention: A Background Paper*. Syracuse University, Copenhagen.

UGA Mentor program (2020). *Survey of mentor program,* University of Georgia, USA. Available at mentor.uga.edu.

APPENDICES: ANALYSED DATA

Appendix 1

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Hstudace	Freq.	Percent	Cum.
1	4	25.00	25.00
2	1	6.25	31.25
3	6	37.50	68.75
4	1	6.25	75.00
5	2	12.50	87.50
6	2	12.50	100.00
Total	16	100.00	

Appendix 2

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Source	SS	df	MS	Number of obs	=	24
				F(4, 19)	=	28.28
Model	10.809435	4	2.70235875	Prob > F	=	0.0000
Residual	1.815565	19	.095556053	R-squared	=	0.8562
				Adj R-squared	=	0.8259
Total	12.625	23	.548913043	Root MSE	=	.30912

sreten	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
sfund	.1748452	.1258	1.39	0.181	-.0884572	.4381476
mentor	.2449812	.0772935	3.17	0.005	.083204	.4067584
sretenc	.2997118	.1136541	2.64	0.016	.061831	.5375925
instenc	.2263961	.0745718	3.04	0.007	.0703156	.3824767
_cons	.3615682	.3879737	0.93	0.363	-.4504702	1.173606

Appendix 3

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Source	SS	df	MS	Number of obs	=	76
				F(4, 71)	=	160.69
Model	42.6919509	4	10.6729877	Prob > F	=	0.0000
Residual	4.71594385	71	.066421744	R-squared	=	0.9005
				Adj R-squared	=	0.8949
Total	47.4078947	75	.632105263	Root MSE	=	.25772

sreten	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
sfund	.2589592	.0371986	6.96	0.000	.1847873	.333131
mentor	.2505706	.0367438	6.82	0.000	.1773056	.3238357
sretenc	.172924	.0470074	3.68	0.000	.0791939	.2666541
instenc	.2456838	.0278035	8.84	0.000	.1902452	.3011225
_cons	.4632174	.1597099	2.90	0.005	.144765	.7816698