

ARE THE REASONS FOR STUDENT DROPOUT RATE AT COMMUNITY EDUCATION AND TRAINING COLLEGE JUSTIFIABLE?

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Abstract: Community Education and Training Colleges are established to develop and improve skills in South Africa, especially those skills that are not taught in Institutions of Higher Learning such as Universities. However, these Colleges as a relatively new sector are faced with a number of challenges ranging from infrastructure to high drop-out rates. Therefore, the purpose of this study was to establish whether there was any significant relationship between factors influencing students to quit this sector and drop-out rate in Community Colleges. A quantitative method was used wherein a questionnaire was administered to the students to conduct the study. A sample of (n=66) was drawn from the population (N=200) students. Eighty percent of the questionnaires were returned, representing fifty-three (53) students. There were three hypotheses of the study; (Ho1): there is no significant relationship between lack of student support services and drop-out rate; (Ho2): there is no significant relationship between less teaching and learning hours and drop-out rate and (Ho3): there is no significant relationship between learning and teaching support material and drop-out rate. The study produced the following results ($r=.24$, $n=53$, $p\text{-value}=.00$); ($r=.25$, $n=53$, $p\text{-value}=.00$); ($r=.23$, $n=53$, $p=.00$), respectively. The results indicated a statistically significant relationship between independent variables (lack of student support services, less teaching and learning hours, learning, and teaching support material) and a dependent variable (drop-out rate).

Keywords: dropout, teaching, learning, student

Introduction

The White Paper on Post-School Education, 2013, transferred community colleges to the Department of Higher Education and Training (DHET). There are nine (9) community colleges across South Africa. These community colleges aimed to offer skills to people that could not be served through universities and technical and vocational education and training (TVET) colleges (Department of Higher Education, RSA, 2013a). This is so because not all learners can be accommodated at universities and other colleges (Department of Higher Education, RSA, 2014). Community colleges are intended to provide skills and knowledge to students (Janis, 2013). These skills are taught part or full time depending on the needs of the students. The qualifications that these students receive from community colleges can further their studies, and to a larger extent the students can apply for job opportunities (Nzimande, 2014), using the skills-based programs acquired at these institutions. However, this sector being a relatively new sector. Most of the challenges are related to infrastructure. These infrastructure challenges are exacerbated by the fact that these community colleges rely solely on the grants from government to run their operations (Nzimande, 2014). These grants are transferred to colleges in trenches. In some instance colleges will have to do with what they have and is difficult to raise funds

through students. However, colleges are not only faced with challenges related to infrastructure and funding but also student support (Department of Higher Education, RSA, 2013a). It should be noted that some students in these colleges have not been studying in a longest time and required extensive support. Again, the students come from a background of not having completed matric and find it difficult to endure intense teaching and learning (Department of Higher Education, RSA, 2014). However, this paper focuses only on three factors contributing to dropout rates (lack of student support services, fewer teaching and learning hours, learning and teaching support material contributing to dropout rates in community colleges).

Research purpose and objectives

The study is intended to evaluate the impact of factors influencing dropout rates in Mpumalanga Community Education Training College and to propose programmes that can be implemented to reduce levels of dropout rates.

Literature review

Factors influencing student dropouts

Various scholars have written about dropout rates in Institutions of Higher Learning in different countries including South Africa (Balraj & Maalini, 2018; Viloría, Padilla, Vargas-Mercado, Hernandez-Palma, Llinas & David, 2019; Yilmaz & Karatas, 2022). There are various reasons or factors that contribute to dropout rates. These reasons are personal such commitments from the students themselves (Perez, Castellanos & Correal, 2018). Others are more related to socio-economic challenges that students are faced with at home and in communities where they live. Socio-economic factors include the lack of financial resources to support the students to pay necessities such as transportation in instances wherein the college is not within the walking distance of the college center (Yilmaz & Karatas, 2022). Not only transportation is a challenge but hunger as the students is expected to be at the college for longer periods, unlike in mainstream schools where there are feeding schemes. A learner is sure that at least one meal will be provided at school but not at the college. Student commitment to their studies and the choices of subjects they chose contribute to dropout rates (Viloría et al. 2022). Community colleges are by their very nature intended to address skills shortages by targeting community members who have not had an opportunity to study in mainstream schools and colleges (Balraj & Maalini, 2018). The community colleges attract different levels of literacy, young and old. Therefore, commitment will vary from the students. Most students who decide to enroll at community colleges, are most of time doubling-timing (Yilmaz & Karatas, 2022). Meaning that while attending at the college, the student would be looking at other opportunities related to jobs. Once a student gets a job even before completing the course enrolled in, the student will not think twice about quitting college (Balraj & Maalini, 2018).

Lack of student support services

Institutions of learning have a responsibility to assist and support students to be successful in their studies (Chacha, Lopez, Guerrero & Villacis, 2020). It is true in Institutions of Higher Learning and other colleges, there are student support centers. This also applies to other mainstream schools that are well-resourced have a dedicated office that deals with

issues affecting student performance (Chacha et al., 2020). However, it cannot be said with community colleges in respect of providing the kind of student support that mainstream universities are providing (Chacha et al., 2020). However, it should be remembered that community colleges do not have the necessary resources to support the student being a relatively new sector (Mduma, Kalegele & Machuve, 2019). The human resources that community colleges have are stretched to the limit, and most these resources are utilized for teaching and learning (Aulck, Velagapudi, Blumenstock & West, 2016). Student support takes a back seat. As such students suffers a lot as their personal challenges are not attended to. Community colleges are unable to hire psychologist and other mental health specialist due to lack of finances (Aulck et al., 2016). Even during examinations, students lack that support to attend to stresses that are associated with examinations (Mduma et al., 2019). Hence many students do not perform well in their studies. This is further exacerbated by the lack of fundraising initiatives from the community colleges (Berens, Schneider, Gortz, Oster & Burghoff, 2019), as

Less teaching and learning hours

Notional hours per learning area are important in that a syllabus is set out in a way that a student grasp the content that is taught in that specific subject (Letseka & Maile, 2008). Hence in mainstream schools, students have almost the whole day at school with their educators who impart knowledge to these students. However, it is not true with community colleges, the hours that are spent in teaching and learning are limited (Parliamentary Monitoring Group, 2020). It must be noted that most lecturers are educators in mainstream schools during the day and are lecturers at night as well (Parliamentary Monitoring Group, 2020). Hence, the community colleges were at some point referred to as night schools. The time allocated for students at community colleges is limited and the content in most instance is overwhelming (Parliamentary Monitoring Group, 2020). This is one reason that most students are not successful in their studies. Not only are lecturers challenged in terms of contact time, but even students themselves have their own challenges. In that some students are working during the day and must be at school at night (Parliamentary Monitoring Group, 2020). This does not give them to engage with the contents of the learning areas, meaning that there is limited student-lecturer time on task (Parliamentary Monitoring Group, 2020). Again, students find it difficult to concentrate on their studies because during the day they have to deal with work-related matters, which can be stressful at times (Da Costa, De Souza & De Casia, 2018). One finds that these students, they woke when it is time to write examination and they find themselves ill-prepared to be successful in the studies. These further contributes to dropout rates (Putter, Fiocco & Geskus, 2007).

Learning and teaching support material

Learning and teaching support material (LTSM) are ‘an integral and vital part of every education system and the effective management, utilization and maintenance of this valuable resource will ensure access and support to the delivery of quality education’ (Northern Cape Department of Education, 2023). Therefore, without these resources without then an institution of learning would not be fully functional. Lecturers and students alike are expected to have LTSM to perform the primary mandate of the existence community colleges. However, due to no sufficient funding from the department, colleges are unable to procure enough material for teaching and learning (Etesike, 2017). This is the

process affect the performance of students (Maguire & Delahunt, 2017). In instances wherein colleges are able to issue LTSM to students beside the fact that these materials are scarce, students do not return the stationery at the end of their studies (Maguire & Delahunt, 2017). Those students who dropout before completing their qualifications, they do not return these materials to the college. Colleges are expected to replenish lost material on budget that is not available (Zhu & Tong, 2022). The provision of textbooks for every learner in the schooling system is one of the priorities of the government and millions of rands are spent annually on LTSM (Northern Cape Department of Education, 2023). If this resource is not protected and valued, money which otherwise could have been used for new innovative LTSM has to be used to replace books which are lying in homes not being utilized (Northern Cape Department of Education, 2023).

Drop-out rate

Drop-out is broadly defined as ‘the student’s failure to enroll for a definite number of successive semesters.’ (GrauValldosera & Minguillon, 2014). However, there are many different definitions of dropout in the literature, usually related to a temporal conception. Hence, there is no clear-cut definition of the concept (GrauValldosera & Minguillon, 2014). Therefore, drop-out rate fluctuates because it is influence by various factors. There are several reasons that can be found in literature on reasons why students quit university, college or school. These reasons cannot be located or confined in one factor but in an array of factors (Nichols, 2010). Some of these of these factors are personal and social factors, to name a few. Hence, some authors when referring to drop-out rate they confine it to students not completing their studies (Valldosera, Minguillón & Blasco-Moreno). Of note is that students that drop-out from institutions of learning, have little success in securing jobs (Valldosera et al., 2018). In instances wherein they are employed, it would be low-paying jobs which provide minimal opportunities for growth and development. It is for this reason that Lehan, Hussey and Shriner (2018) emphasize that, it is important that students are coached and mentored to motivate and encourage them to complete their studies. However, despite the fact that there is no clear-cut definition of drop-out rate but what is being observed is that a number of students do not finish their studies. Lehan et al., (2018) observe this phenomenon from the importance of coaching and mentoring programs for students so that they are kept motivated to complete their studies

Research methodology and design

Research approach

The study employed a quantitative method. In this study a questionnaire was utilized to collect data and was analyzed using MS Excel and further transferred to SPSS for more complex analyses. Rubin and Babbie (2016) posit that this type of research (quantitative) gives the researchers an opportunity to use a questionnaire and not to have an influence on how respondents fill in the questionnaire, which allows independence from the respondents’ perspective.

Research participants

The total number of people in a particular environment or elements that are occupying a particular space (Rubin & Babbie, 2016). The sample is drawn from the population.

Sampling should represent characteristics of the population for the study to be valid. Only one satellite of the Mpumalanga Community College Education and Training College. The population was (N=200) and the sample was (n=66), which comprised of students from various programmes of the college. The response rate of the questionnaire was (80%) meaning that fifty-three (53) questionnaires were returned. The results below demonstrate that most students at this college are females at 60% and males at 40%. In respect of age group, most students are in the age category of 31-40 years and the least is in the age category of 41-50 years. The demographics regarding education further reveal that most students have qualifications or Grades that are below Grade 12 with a 92% and the least have certificates and diplomas at 2% each, respectively. In addition, students that are taking skills are a majority with 91% and the rest at 9% have taken full qualifications.

Table 1: Demographic profile of respondents

Variables	Frequency	Percentage
Gender of respondents		
Female	32	60
Male	21	40
Age Group of respondents		
18-20	11	21
21-30	16	30
31-40	18	34
41-50	8	15
Education of respondents		
Below Grade 12	49	92
Grade 12	2	4
Certificate	1	2
Diploma	1	2
Programme		
Skills Programme	48	91
Full Qualification	5	9

Research instrument

The questionnaire was divided into four (4) sections as follows: section A: demographics (gender, age group, education, programme); section B: Lack of student support services with five (5) statements/questions; section C: Less teaching and learning hours with four (4) statements/questions; section D: Learning and teaching support material with seven (7) statements/questions and section E: drop-out rate with five (5) statements/questions. A 5-point Likert scale (1=Strongly disagree; 2=Disagree; 3=Neutral; 4=Agree; and 5=Strongly agree) was utilized for all independent (Factors influencing student dropouts) variables and a dependent (drop-out rate) variable. The reliability and validity of the questionnaire was tested using a Cronbach’s alpha. Statistical Package for Social Sciences version 22 was utilized. The instrument proved to meet both the reliability and validity of a recommended threshold of above 0.6 (Fornell & Larcker, 1981). Below (Table 2) present the validity and reliability of the instrument so utilized.

Table 2: Cronbach Alpha coefficients

Construct	Cronbach’s Alpha	N of items
Lack of student support services	.74	5

Less teaching and learning hours	.66	4
Learning and teaching support material	.88	7
Drop-out rate	.78	5

Research procedure and ethical considerations

This was survey research wherein a questionnaire was utilized. The questionnaire was used to establish whether there was any significant relationship between factors leading to student quitting community colleges and drop-out rate. Collecting data utilizing a questionnaire has more advantage than the drawbacks in that questionnaires make data collection to be simple. The researcher while collecting data had no direct influence as the respondents complete a questionnaire independently away from the researchers. What the researchers do is collect or receive the questionnaires for analysis purposes and not to do any other thing besides analyzing. Confidentiality on data collected through a questionnaire protected the confidentiality of correspondents as their private information even their names were not revealed or written on the questionnaires (Hennink, Hutter & Bailey, 2011).

The questionnaire was administered to a group of students at Mpumalanga Community Education and Training College, who are registered for various programmes, mostly skills programmes. The sample drawn from the population of was 66. The questionnaire was first piloted to various students and lecturers to establish whether the questionnaire was clear enough to be completed with few errors. The questionnaires were delivered physically by the researchers wherein the students were given at fifteen (15 school days to complete the questionnaires). Students had to submit the completed questionnaires at a box provided from the lecturer room. After fifteen working days, the questionnaires were collected from the box provided, and capturing commenced. Data was first captured and validated on MS Excel and then transferred to Statistical Package for Social Sciences (SPSS) version 22. Complicated analyses were done from SPSS, while for simple statistics such as percentages MS Excel were used. In addition, respondents were given an option to withdraw from the study in instances wherein they felt that their privacy was being infringed upon (De Vos, Strydom, Schulze & Patel, 2011). The researchers emphasized that confidentiality of respondents will be kept private, and information was used for the purposes of the study (Rubin & Babbie, 2016).

Statistical analysis

Data was analysed using both the MS Excel and SPSS. In analysing the demographics (gender, age-group, education, programme), frequencies and percentages were used to demonstrate statistical output. Further analysis conducted on SPSS programme was on the correlations between independent variables (Lack of student support services, less teaching and learning hours, learning, and teaching support material) and a dependent variable (drop-out rate). Furthermore, means and standard deviations were generated. In addition, the significance value was tested at a 95% confidence level ($p \leq 0.05$). Tables were used to present the data which indicated the strength of variables.

Results and Discussions

The demographic results in Table 1 in respect of gender: female (60%), male (40%), In respect of the age group, the results indicated that 34% of the respondents are in the age

category of 31-40 years, and the least age group were those in the age group category of 41-50 years. The results with regard to the education further demonstrate that most students have a qualification, or a Grade below Grade 12 (92%) and the least were students with either a certificate or a diploma at 2% each. Respondents with regard to programme they are pursuing indicated that most students are pursuing a skills programme with 91% of them and the least being enrolled for a full qualification at 9%. Table 3 below demonstrate the results of both the mean and standard deviation. The mean for all the variables was above 3, in view of the five-point Likert scale the results are above the average.

Table 3: Summary of descriptive statistics

Variable	N	Mean	Std. Dev
	Statistic	Statistic	Statistic
Lack of student support	53	3.06	.400
Less teaching and learning hours	53	3.00	.414
Learning and teaching support material	53	3.08	.420
Drop-out rate	53	3.05	.396
Valid N (listwise)	53		

A statistical test that measures how well sample data matches a distribution from a population with a normal distribution is referred to as goodness-of-fit (Dong, Dubas & Dekovic, 2022). Augustine and Stifter (2019) posit that the goodness-of-fit test determines the difference between the actual and predicted values of the model in the case of a normal distribution. The results above in (Table 4) AMOS 18 was used to evaluate the goodness-of-fit indices. The results as demonstrated below (Table 4) is almost the perfect goodness of fit.

Table 4: Goodness-of-fit

Fit statistics	Recommended Limit	Obtained
X2	-	3.70
Df	-	3 ^a
P value	p <= 0.05	0.90
Goodness-of-Fit Index (GFI)	>0.95	0.94
Adjusted Goodness-of- Fit Index (AGFI)	>0.95	0.95

The purpose of the study was to establish the relationship between factors that have an influence on drop-out rate in Community Education and Training Colleges. To establish the relationships between independent and dependent variables the following statements were hypotheses of the study: Ho1: There is no significant relationship between lack of student support services and drop-out rate. Ho2: There is no significant relationship between less teaching and learning hours and drop-out rate. Ho3: There is no significant relationship between learning and teaching support material and drop-out rate. A Pearson-product moment was utilised to establish the relationships between independent and dependent variables under study. Table 5 demonstrate the results as generated using the Pearson-product moment.: Ho1: There is no significant relationship between lack of student support services and drop-out rate. The results from this hypothesis were (r=.24, n=53, p-value-.00), the results indicate that there is a correlation between lack of student support services and drop-out rate at Community Education and Training Colleges, and

this relationship is statistically significant. This means that, as one variable increase so does the other variable. Therefore, the null hypothesis was not supported.

The results for Ho2, stating that there is no significant relationship between less teaching and learning hours and drop-out rate. The results from this hypothesis were ($r=.25$, $n=53$, $p\text{-value}=.00$), the results indicate that there is a correlation between less teaching and learning hours and drop-out rate at Community Education and Training Colleges, and this relationship is statistically significant. This means that, as one variable increases so is the other variable. Therefore, the null hypothesis was not supported. The findings for Ho3, stating that there is no significant relationship between learning and teaching support material and drop-out rate. The results from this hypothesis were ($r=.23$, $n=53$, $p\text{-value}=.00$), the results indicate that there is a correlation between less teaching and learning and teaching support material and drop-out rate at Community Education and Training Colleges, and this relationship is statistically significant. Therefore, the null hypothesis was not supported.

Table 5: Hypotheses on relationship between variables

No	Hypotheses	Path Coefficients (P value)	Supported/not supported
(Ho1)	There is no significant relationship between Lack of student support services and drop-out rate.	($r = .248^{**}$, $P>0.05$)	Null hypothesis not supported
(Ho2)	There is no significant relationship between Less teaching and learning hours and drop-out rate.	($r = .250^{**}$, $P>0.05$)	Null hypothesis not supported
(Ho3)	There is no significant relationship between Learning and teaching support material and drop-out rate.	($r = -.232^{**}$, $P>0.05$)	Null hypothesis not supported

Practical implications

The study makes contribution to the body of knowledge within the education field in as far as factors influencing drop-out rate at Community Education and Training Colleges. The knowledge generated from the study will assist Colleges to improve support of students to be successful in their studies. In addition, the study can be used to used side by side with other studies conducted in this area of Community Colleges.

Limitations and recommendations

The study was conducted within the Community Education and Training Colleges, and not any other Institution of Higher Learning not all Colleges were included only the Mpumalanga CET. Furthermore, the study focused on independent and dependent variables identified at the commencement of the study.

Conclusion

The purpose of the study was to establish relationships between independent variables (lack of student support services, less teaching and learning hours, learning, and teaching support material) influencing drop-out rate and dependent variables at Community Education and Training Colleges. The results indicated that for hypotheses (Ho1); (Ho2) and (Ho3), there is a positive and statistically significant correlations between factors influencing students

to quit from Community Education and Training Colleges and the drop-out rate. The results in general meant that as the independent variables increases so is the dependent variable. Therefore, in the three hypotheses of the study, null hypotheses were not supported in favour of alternative hypotheses.

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