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Full Length Research Paper

Factors influencing academic failure of university students

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There was a close link between education and development. Education played a vital role in human capital formation. Academic failure from university was a problem that had became a serious concern for higher education institutions. This study presented the result of a recent investigation at the University of Gujrat that attempted to identify the post enrollment factors that students perceived as having important influences on students failures in their university studies. Data was collected by using questionnaire. The Independent-Samples t-test procedure was used to compares means for two groups of cases. Structural equation modeling (SEM) analysis was also performing to test the relationship among latent factor represented by the actual data from 100 drop out students of university. Finding indicates that male and female groups were significantly different in their perception of causes of academic failure, but perception of students from different programs Bachelors in science, Master in Arts and Science (BS, M.A/M.Sc) was not significantly different. In our estimated model class participation and lack of family support was directly affected on students drop out from university, but wrong choice of subject and change of system which was basically link with class participation and indirectly effect on students drop out.

Key words: Identify, lack of commitment, appropriate, Gujrat.

INTRODUCTION

Education plays the role of leadership in the society. In Quran (Holy book of Muslims) the first revelation from God to Prophet Mohammad was an order of *Iqra*…… means read. It indicates the importance of education in Islam. In our age education plays a essential role in transforming the society. The role of university in transforming the society is particularly critical because it educates virtually all the people who are destined for leadership in our society from all walks of life. Its main duty is to prepare leadership through sound liberal learning not only during the period of formal education but also throughout their lives. So university is responsible to turnout well-educated population for the leadership of the nation. All over the world universities are guiding and co-operating with the industrial an agricultural development organizations and they are developing their economics rapidly and meaningfully

Students entering universities in Pakistan come from a wide range of social and cultural backgrounds that give them very different life experiences, different educational opportunities and a great variety of expectations, needs and academic potential .This situation also occurs in other countries that have shifted the focus of higher education from exclusiveness to mass opportunity (McKenzie and Schweitzer, 2001). When students are admitted to a higher education institution there is a understood assumption that they will be capable of successfully completing the course in which they are permitted to enroll or not. Therefore, it is necessary to have entry requirements that permit valid student selection decisions to be made. However, there can be no guarantee that these students will eventually satisfy the

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requirements for graduation. There are many factors that can contribute to the high drop out rates such as low commitment with study, drug use, the lack of motivation or interest or the lack of parental involvement and supervision. However, these individual reasons are not the only factors that can lead teens to dropout. University was traditionally considered a ladder out of poverty for young working class people. According to Peters (1992) dropping out from classes is an old thing. He reported that the completion of even the first arts course leading to the Bachelor's degree is not the rule but the exception. This is so because one quarter to one third of registered students left the university as Bachelors, hardly one twentieth to one sixteenth as Masters. There are various reasons that made them leave, that is mostly personal characteristics, environmental characteristics and academic factors. He further observes that students drop out because of lack of motivation, lack of interest, boredom, apathy, rejection of the teaching programmed, the feeling of not receiving anything from the course, lack of purpose and uncertainty in the occupational orientation.

The fact that so many factors can be important is probably the main reason that single measures based on previous academic success, particularly at school, are not strong predictors of success at university. Killen (1994) suggested that no matter how carefully students are constructed school matriculation examinations or special university entrance examinations are not likely to be strong predictors of success at university because they do not measure any intellective factors that are related to many of the important influences on success that students encounter after they enroll at university. Given the complexity of the problem, it seems unlikely that there is much value in trying to find simple pre-enrolment predictors of success at university. Rather, it might be more useful to focus on post-enrolment factors. Studies that have taken this approach have identified a limited number of factors that appear to have a strong influence on academic success.

The purpose of the study is to identify the post enrollment factors that lecturers and students see as having important influences on student failure at university. I think if we are able to uncover the views of students have about these different adversities that exist which may allow us to better understand what types of programs will be most effective. Identifying these factors has the potential to be useful in several important ways. First, it can provide a basis for helping students to reflect on their perceptions and expectations of university study so that they can gain more control over their learning and Approach University studies in a way that will maximize their chances of success. Second, it can provide a basis for helping lecturers reflect on their expectations of and about students so that they will be better informed about ways in which they can facilitate student learning, enhance the influence of positive factors and minimize the influence of negative factors on student success. Third, the results can be used by university administrators to help them provide a learning environment that will maximize their chance of success.

Purposed model of the study

A purposed model of this study was generated by using existing literature. In this model, lack of commitment to study, time management and class participation have direct effect on dropout while all other factors have indirect effect (Figure 1).

LITERATURE REVIEW

Tinto (1975) was the first investigator to propose a longitudinal model of student drop out, that predicted, rather than simply explained this behavior. His theory was based on Durkheim's (1961) theory on suicide, which suggested that suicide was most likely when an individual was insufficiently integrated into society, both in terms of insufficient collective affiliation, and also insufficient congruence with the moral values of society. He viewed drop out as analogous to suicide, and suggested it occurred when an individual had insufficient social integration with others at university, or when they did not fit in with the norms and value patterns of the university, and were unable to achieve academically to the required level (that is insufficient academic integration). Social integration occurs through informal peer group associations, semiformal extracurricular activities, and also through interaction with university staff. Many research studies have specified that family factors are significantly related to the decision of students to drop out (Noth and Neill, 1981). Studies found that the dropout's family was less solid, less influenced by a father, less likely to interact in leisure activities, and less able to communicate than the persister's family. Research studies also indicated that loss of a family member due to death or divorce and other family problems influence a student's decision to drop out. In addition, the level of education and the occupation of dropouts' parents were significant factors. The finding shows that the focus of the study is on the failure due to family maters. The study is enormously related to our research, because both are discussed in the issues of failures. Makki (2007) in his study found that majority of drop outs have no intention of continuing their studies either because they have given up for social or economic reasons, they have gone to study in another country, they have changed disciplines or have already built a satisfactory career without the need for educational qualifications. The largest percentage of non-active students appear to come from socially and economically weaker classes who attend less glamorous courses whose degrees have rather dubious value in the wider

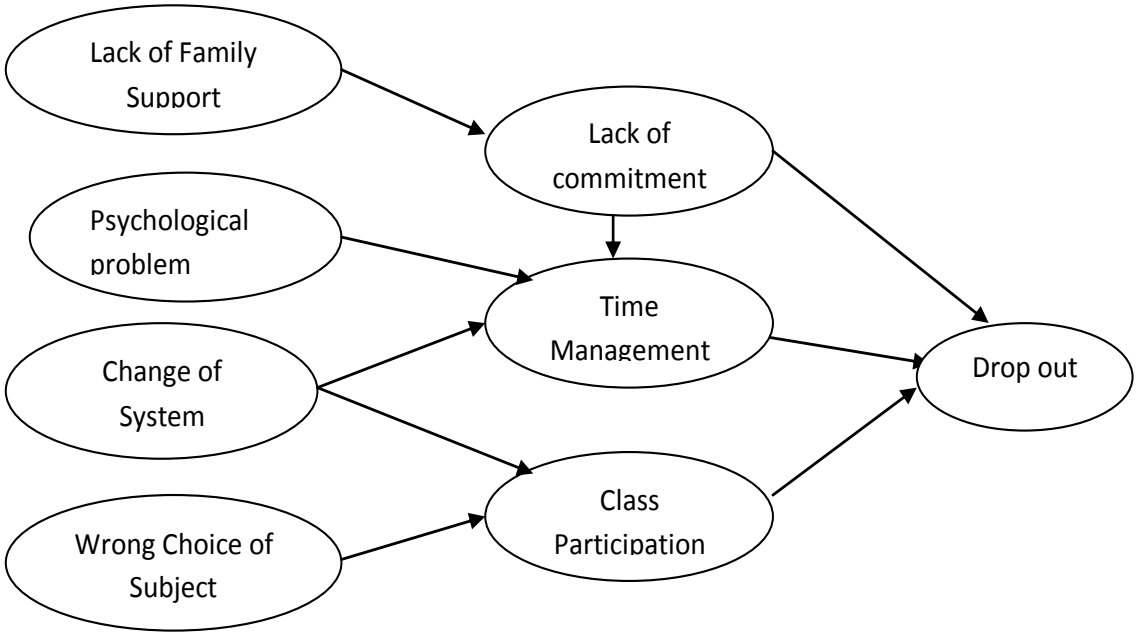

Figure 1. Purposed model of the study.

labour market system. This study showed the positive relationship between social and economic reasons in decision making to drop out. It also stressed that students should show the willingness to maintain the sense of responsibility towards their academic goal (Young et al., 2008). The purpose of this study is to develop a scale to measure drop out for cyber-university students in e-learning. In this study five dimensions of learners drop out were identified; 1) students background, 2) students characteristic, 3) curriculum and contents, 4) educational environment, and 5) educational outcome. And each dimension consists of several items. For items analysis, EFA (exploratory factor analysis) will be performed in study 1. In order to validate the scale, CFA (confirmatory factor analysis) will be conducted. This research will present the reliability and validity of the new scale of drop-out in Cyber University. In this study, five reasons of dropping are discussed; the most important are students back ground, curriculum and contents. These fetchers are also elaborated in our study.

Objective of the study

1. To explore the demographic characteristics of the respondents.
2. To develop a drop out model of structural equation modeling.
3. To provide estimated drop out model or to find the estimate of suggested model
4. To conform the factors those can effect on drop out of students which we have suggested.

DATA AND METHODOLOGY

Questionnaire

The questionnaire consisted of eight factors: time management, wrong choice of subject, family problems, the lack of commitment or interest, low understanding level, class participation, psychological problem, because of semester system.

Design and analysis

Two major statistical methods: structural equation model and independent sample t-test are use for analysis of data. First for each factor structural equation model is use to examine the influence of factors on student dropout. Second independent sample t- test procedure is use to compares means for two groups of cases (Bs/M.A/M.Sc, male/female).

Confirmatory factor analysis

A confirmatory factor analysis (CFA) is perform to test the adequacy of the measurement model for the latten factor of this study through STATISTICA 7.0 software, to determine the goodness of fit. The factor which is conformed by confirmatory factor analysis is than the conformed factor is use in structured equation modeling. Since chi-square test is based against large sample sizes (Byrne, 1994) the goodness of fit index is more reliable for testing model fit. The factors Wrong choice of subject, change of system, lack of family support, class participation, time management, psychological problem and overall dropout are conformed. Because there goodness of fit indicate that these factors are fulfill the given criteria. But the factor lack of commitment is none conformed.

STRUCTURAL EQUATION MODELING RESULTS

Structural equation modeling (SEM) analysis is perform

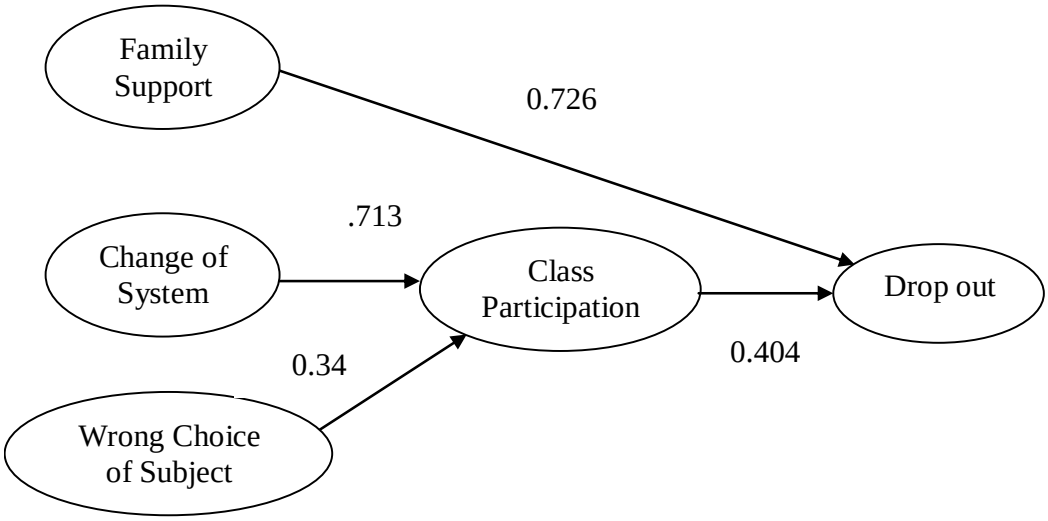

Figure 2. Hypothesized Structural Equation Modeling of factor affecting student's dropout from university with parameter estimates.

Table 1. Goodness of fit indexes of structural equation model.

Fit statistics	Values	Criterion
Chi-Square	153.049	Smaller is better
GFI	0.964	≥0.95
RNSEA Index	0.997	≤0.08
Non-Normed Fit Index	0.999	≥0.95
Comparative Fit Index	0.0079	≥0.95
RMS Standardized Residual	0.079	≤0.08

to test the relationship among latent factor represented by the actual data from 100 drop out students of university with the STATISTICS 7.0 statistical package on the questions from five likert-scale.Different structure run on this data but these path are not significant there goodness of fit are not fulfill the given criteria. Finally we run a Figure 2 which is appropriate according to given criteria. In Figure 2, circles represent basic factors. Lines connecting variables imply a direct effect. The wrong choice of subject factor measures four variables, change of system measures four variables, class participation measure four variables, lack of family support measures four variables, and overall dropout measures eight variables but in model fitting we use only those variables which have high value of parameter estimates.

The model is specified by the following equations:

The estimated equations are;

Class participation = 0.34 wrong choice of subject + 0.713change of system

Drop out = B class participation + $\acute{\Gamma}_3$ lack of family support + ς_2

Drop out = 0.404 class participation + 0.404 lack of family support

Drop out = $\acute{\Gamma}_1$ wrong choice of subject + $\acute{\Gamma}_2$ change of system + $\acute{\Gamma}_3$ lack of family support + B class participation + $\varsigma 3$

Drop out = 0.404 (0.34 wrong choice of subject + 0.713 change of system) + 0.404 lack of family support

Finally estimated equation of drop out model is

Drop out = 0.1373 wrong choice of subject + 0.2881 change of system + 0.404 lack of family support

Several indices describe the overall fit between the observed data and a model, including Chi - square, GFI, AGFI, CFI, NNFI and RMSEA. Factor class participation and lack of family support is directly affected on students drop out from universities, but wrong choice of subject and change of system which is basically link with class participation and indirectly effect on students drop out. So in this way we have a path to find the actual affected factors that affects student's dropout from universities directly or indirectly.

Table 2 shows that in this model we have four relationships which show that all the p-values of the relationship are significance. For checking the goodness of fit of the model we use the results of Table 1. The goodness of fit indices indicates that the model was adequate: the GFI=0.964 which is greater than 0.95 and also NNFI=0.997, CFI=0.999, which is also greater than 0.95, all indices fulfill the given criteria (Hu and Bentler, 1999) which indicated that the model fit the data adequately. The RMSEA=0.027, which is smaller than .08, indicated a fair goodness of fit. As a result, we

Table 2. Estimated model of structural equation model.

	Parameter	Standard error	T-Statistics	Prob. level
(WCS)-15->(CP)	0.340	0.124	2.738	0.006
(COS)-16->(CP)	0.713	0.137	5.211	0.000
(CP)-17->(DO)	0.404	0.157	2.573	0.010
(FS)-18->(DO)	0.726	0.119	6.105	0.000

Table 3. The independent-samples t-test for compares means of gender.

Factor with total scores	Male		Female		T value	P value
	Mean	Std. Deviation	Mean	Std. Deviation		
Lack of commitment study	4.3684	.64453	1.5349	.66722	-1.259	.011
Wrong choice of subject	2.4386	.80217	2.5116	.70279	-.475	.636
Class participation	8.8421	4.30859	9.2558	4.69089	-.458	.648
semester system	2.6842	.46896	2.6977	.46470	-.143	.887
Time management	5.5088	.57080	2.6279	.57831	-1.027	.031
Lack of Family support	2.6491	.58221	2.7674	.42746	-1.123	.264
Psychological	2.0702	.45746	1.9767	.34423	1.121	.265

obtained a proper model fitting by using Structure Equation Model.

Figure 2 summaries the relationship among the factors and the path coefficients. The path coefficients between the latent factors are significant (at the .05 level). Table 2 shows that the wrong choice of subjects has positive influence on the class participation (β=.34, t=2.738, p<.05) it means that as students select wrong subject or in other word not interesting subject they don't perform better in the class and at last he/she will drop from university. Result also shows that the change of system has positive influence on the class participation (β=.713, t=5.211, p<.05) it means that change of system (annual to semester) play a role in student drop out. Family support has positive influence on the students drop out (β=.404, t=2.573, p<.05) it means that family support and home environment has great impact on students success or failure. Class participation has great influence on the students drop out (β=.404, t=2.573, p<.05) it shows that if students don't perform well in class they can not get academic success. Finally it shows that all factors have significant effect on student's academic performance directly or indirectly.

T-test

The Independent-Samples t-test procedure is use to compares means for two groups of cases. Since the data is approximately normal so in this study we use independent sample t–test to check the mean difference of the total score of all the factors among the students of male and female groups. Results in Table 3 shows that males and female groups are significantly differ in their perceptions of cause of academic failure in the total score of the two factors. For example, lack of commitment to study and time management. It also shows that males and female groups are not significantly different in their perceptions of cause of academic failure in the total score of the six factors e.g., wrong choice of subject, class participation, semester system, lack of family support, psychological problem.

Independent sample t -test is also performed to see the mean difference of the total score of all the factors among the students from BS (Bachelor in Science) and M.A/M.Sc (Master in Science) classes. Result in Table 4 shows that when the students are classified in term of their classes no significance differences are found among them in term of total score of the entire instrument (factors).

Conclusion

Student effort is prominent in student's expectation of success and failure. Active study, setting appropriate goals, a good study environment, and effective time management are considered important for academic success. Academic failure is attributed primarily to lack of study, poor time management, and inadequate goal setting. We can say that a better understanding of the factors or variables that would influence academic failure and those factors that would motivate students to engage persistently in their studies might also hold the key towards improved student performance at institutions of higher learning.

Table 4. The independent-samples t-test for compares means of BS and MA/MSC classes.

Factor with total scores	MA/Msc		BS		T value	P value
	Mean	Std. Deviation	Mean	Std. Deviation		
Lack of commitment study	1.4394	.61090	1.4412	.74635	-.013	.990
Wrong choice of subject	2.5455	.70562	2.3235	.84282	1.393	.487
Class participation	8.7273	4.47401	9.5882	4.43893	-.914	.363
semester system	2.6667	.47502	2.7353	.44781	-.698	.487
Time management	2.5758	.58337	2.5294	.56329	.381	.704
Lack of Family support	2.6818	.58221	2.7353	.42746	-.483	.630
Psychological	2.0152	.41109	2.0588	.42220	-.499	.619

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