



## Puzzle of Dropout in Open University

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### Abstract

*The dropout problem exists in all Open University. Although there is increasing in number of student who are enrolled in an Open University, why students do drop out of Open University? To recognize the factors affecting dropout, an online survey was used to collect data from students drop out of P.N.U (Payame Noor university.) in Iran in 2013. According to regression analysis, the best model with the least variable and  $R^2=0.738$  is meaningful. So one can come to this conclusion that 73.8% of dropout is interpreted by variables of employment, affective friendships, Technology skill, and gender.*

**Keywords:** Dropout, Open University, e-learning, access to technology.

### Introduction

Dropping out is an educational problem that has socio-economic aspects. Several studies have been done about drop outs from open crosses, in Levy's results indicated that students are likely to drop open and e-learning university if students have a lower university status. Levy had resulted that less experience students tend to drop out. In Levy's research, the personal characteristics including gender age, residency statues, major were not statistical significant relation sheep. Student about drop outs from open university may will register<sup>1</sup>. Studding of student dropout has not complexity and detail... much of the real work of retaining students fell on the shoulders of student affairs professionals to prepare students assistance they needed to persist. Faculty has been largely absent. Mostly retention activities were appended to, rather than integrated within, the mainstream of institutional academic life. Retention activities were then, as they are in some measure today, add-ons to existing university activity<sup>2</sup>.

This study tries to investigate the factors affecting the student dropout in new model of puzzle of dropout. There is some research in different approaches to determine dropout problems.

Although the number of adult learners who register in online program has rapidly, the high dropout rate in online courses has been of concern to many higher education institutions and organizations<sup>3</sup>. Factors affecting students drop out of Open university have been studied in many research. Park and choi have been done a quantitative research with dropped out 147 learners in Midwestern University. Dropouts learners showed statistical differences in perceptions of family support, and satisfaction and relevance. It was shown the theoretical framework, including family support, organizational support, satisfaction, and relevance in addition to individual characteristics, that is able to predict learners' decision to drop out. The results clear that lower dropout rates can be achieved if

online program find ways to enhance the relevance of the course. It was shown that adult learners need to be supported by their organizations in order for them to finish online courses<sup>3</sup>.

Issues of personal characteristics, social capital, and technological problems are factors influence a student to dropout. This study tries to investigate the factors that affecting the student dropouts in new model of puzzle of dropout. Each of the puzzle piece, explaining to create a dropout policy for Open University. The puzzle including technology skills, educational skills, social capital, and experiential education.

One of the important factor affect dropout in online courses is belonging to a group. In Picciano' s point , belonging to a group in online courses is important. He believed that student who sits in online program may feel a sense of belonging to a group. Lack of physical relationships in online programs, many have interpreted presence<sup>4</sup>.

Levy, Gortan and Jereb found student satisfaction with e-learning is a key indicator in students' decision to drop out from e-learning courses<sup>5</sup>. Fredericksen et al. show computer literacy did no impact on students' perceived learning and the lack of prior computer skills did not interfere with learning. Even highly experienced Internet users can have significant concerns with e-learning. Using Blackboard, an online course, some students reported the need for more interactive communication and activities<sup>6</sup>.

Parsad and Lewis show an Internet-based technologies as the most widely used technology for the instructional delivery of open education program with 75% of institutions using this form of communication and only 31% for synchronous Internet-based technologies<sup>7</sup>.

Willing and Johnson point that the most often endorsed reasons for leaving were grouped as academic factors, personal

factors, and financial factors. The financial factor is of special concern when considering online programs, because these programs usually lack federal financial aid despite the recent moves toward the amendment of current regulation<sup>8</sup>.

In the paper of Haider and others, an approach is realized to build persona zed e- learning service or SIP based IP network which helps as reference to mobile application developers<sup>9</sup>.

In Tinto's model, emphasis social characteristic. Determining whether persistent learners and dropouts are different in individual characteristics (age, gender, and educational level), external factors including family and organizational supports, and internal factors such as satisfaction and relevance as sub-dimensions of motivation<sup>2</sup>.

For doing the model that highlight the complex manner in social interactions within the formal and informal academic and social systems of the institution upon student dropout. The model did not focus directly on those characteristics other than as they interfaced with the collective attributes of the academic and social systems of the institution<sup>10</sup>. In figure 1, explain puzzle of dropout.

### Methodology

This investigation is done by the method of survey in Iran in 2013. Do documentary study is also used. The information is collected by questionnaire. Social capital, social relations, social skills, and technology variables are the most effective factors in dropout. Regression and coloration analysis were used to compare various factors.

AAOU current students during the academic year 2005-2012 were examined including dropouts students. The set of data used for this study will collect through stratified. The sample was drawn from students enrolled in Bachelors degree in P.N.U that were chosen based on Cochran sampling formula about 251.

**The Hypotheses:** Based on the review literature above, it is evident that hypothesis as follows: There is a statistical relationship among personal characteristics, social capital, educational status, educational field, access to internet and technology and dropout.

### Results and Discussion

Out of 251 student's respondents, 140 were females and 111 were males. 55.8% of sample population consists of females and the rest are males. The highest percentage to the respondents of 72% belonged to age group of 21-30.

**Hypothesis Testing:** There is a statistical relationship among personal characteristics, social capital, educational status, educational field, access to internet and technology and dropout.

Regarding the table 1, personal characteristics (age, status of marriage, employment, income) have significant correlated with the dropout. But gender was not statistical meaningful. Gender has not significant role in dropout student. This result is consistent with Xenos et al. (2002) results<sup>1</sup>. Levy refer to Xenos et al. (2002) results that show there is a significant correlation between students dropout and students age in distance education courses. They claimed that dropout students were older and were employed more hours per week than students that completed the distance education courses. Moreover, their results indicate that gender and students family status were not found to play a key role as a predictor of dropout from distance education courses<sup>1</sup>.

Parker (1999) had done a research on various variables as predictors of students dropout from online education courses. The focus of her study was in locus of control and some demographic characteristics such as gender, age, and the number of hours employed as the main predictors for dropout or success in e-learning courses<sup>11</sup>.

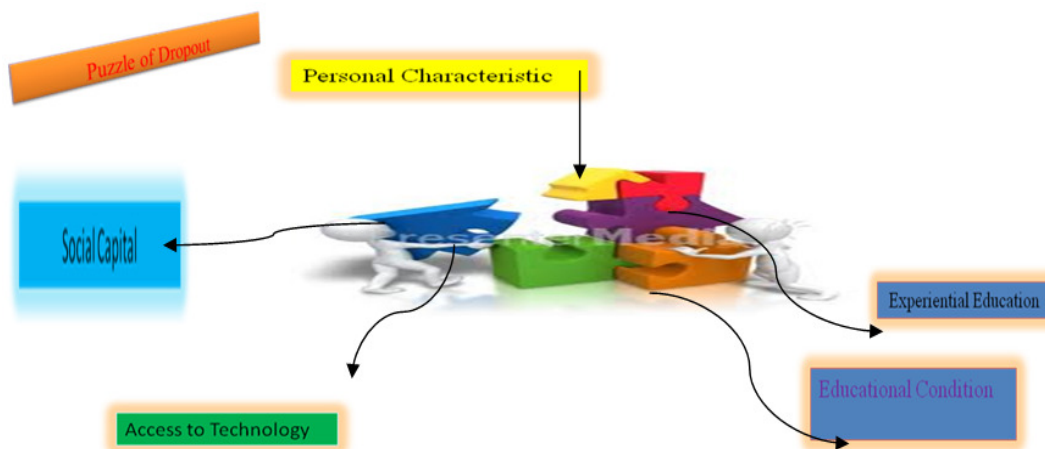


Figure-1  
Puzzel of Dropout

Access to technology and technology skills are not correlated significantly with the dropout. Results of research clearly points out that learning to master the technology is not the only skill that students must overcome to be successful in an open university.

**Hypothesized and Multivariable Regression Relationships:**  
 To analyze the data, the multivariable regression has been used. Considering the results from the multivariable regression statistical analysis of dropout, equals  $R^2=0.738$ . Based on table 2, it can be concluded that employment, affective friendships, technology skill, and gender have affected dropout. According to regression analysis, the best model with the least variable and

$R^2=0.738$  is meaningful. So one can come to this conclusion that 73.8% of dropout is interpreted by variables of employment, affective friendships, Technology skill, and gender. Social capital is not consistent with the previous results. Picciano mentioned that having an informal area to interaction prepares the distance student the same opportunity that on-campus students have to socialize about non-instructional issues<sup>5</sup>.

Issues of gender are related to employment and technology skill.

According the table 1, there is correlated significant relationship between educational status with dropout. Educational field was not correlated significantly with dropout.

**Table-1**  
**Correlations**

		DROPOUT	MARIGE	JOB	TERM	AVERAGE	INCOM	Age
DROPOUT	Correlation Coefficient	1.000	.178**	-.117*	.161**	.156*	-.155*	.241**
	Sig. (1-tailed)	.	.003	.043	.008	.018	.023	.000
	N	244	234	215	221	182	166	242
MARIGE	Correlation Coefficient	.178**	1.000	-.402**	.060	.065	-.002	.457**
	Sig. (1-tailed)	.003	.	.000	.191	.194	.488	.000
	N	234	238	211	216	179	158	236
JOB	Correlation Coefficient	-.117*	-.402**	1.000	-.144*	.097	-.052	-.458**
	Sig. (1-tailed)	.043	.000	.	.022	.111	.269	.000
	N	215	211	218	196	161	145	216
TERM	Correlation Coefficient	.161**	.060	-.144*	1.000	.035	-.138*	.261**
	Sig. (1-tailed)	.008	.191	.022	.	.315	.043	.000
	N	221	216	196	228	188	156	225
AVERAGE	Correlation Coefficient	.156*	.065	.097	.035	1.000	-.170*	-.007
	Sig. (1-tailed)	.018	.194	.111	.315	.	.027	.463
	N	182	179	161	188	188	130	187
INCOM	Correlation Coefficient	-.155*	-.002	-.052	-.138*	-.170*	1.000	-.030
	Sig. (1-tailed)	.023	.488	.269	.043	.027	.	.352
	N	166	158	145	156	130	169	167
Age	Correlation Coefficient	.241**	.457**	-.458**	.261**	-.007	-.030	1.000
	Sig. (1-tailed)	.000	.000	.000	.000	.463	.352	.
	N	242	236	216	225	187	167	248

**Table-2**  
**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
3	(Constant)	5.133	1.242		4.132	.000
	JOB	-3.493	.612	-.665	-5.705	.000
	Membership	1.172	.338	.405	3.462	.002
	GENDER	1.340	.617	.257	2.171	.039

a. Dependent Variable: DROPOUT

## Conclusion

In reply to the main question addressed in this article, this research aims investigate the factors affecting dropout. The dropout problem exists in all university and especially in Open University. An online survey was done to collect data from dropped out students of Payame Noor university. This study tries to investigate the factors affecting the student dropout in new model of puzzle of dropout. The findings of this investigation show that the trend of student's age in PNU is changed. The trend of student's age became young in PNU. Personal characteristics including age, status of marriage, employment, income are correlated significantly with the dropout. Age, status of marriage, employment, income were supported by this study and the rest were not supported by this study. The results of show that demographic characteristics did not predict probably of dropping from online course.

According the results, there is correlated between educational statuses with dropout. Educational field was not correlated significantly with dropout.

Regression analysis was used to compare various factors. The results show that among demographic variables, gender is predicting dropping from a course.

Dropout is a multi-factor phenomenon, in the sense that the reasons behind it stem from the interaction of a wide set of personal and contextual factors<sup>12</sup>.

Dropout exist in the majority of the open university. According to current statistics, it is predicted that in different educational levels (PhD), social demand for registration in Open University will be increasing in Iran in the next decade. Will continue increase in dropout?

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