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Attitudes of University Applicant's toward Distance Education

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Abstract

This paper reports on a research done to study the attitudes of university applicants in Iran-Ardabil toward distance education. The sample of study consisted of university applicants for the 2009-2010 academic year. Using cluster sampling, 408 students (152 male and 256 female students) were selected based on Krejcie- Morgan table and taken into account the adequacy of the sample. The method of study was a survey study. The attitude questionnaire made up of 36 items rated on a 5-point Likert scale was used to collect data. The questionnaire included emotional, cognitive, and tendency to act subdivisions. The reliability of the questionnaire was calculated using internal consistency. The reliability of the questionnaire was $\alpha = .86$. Findings ($t_{(407)} = -21.14$, $p < .01$) showed that the total mean of attitudes of students (97.3) is significantly lower than the conceptual mean (108).

Keywords: attitude, distance education, Payame Noor University

1. Introduction

Today, a great number of applicants seeking for higher education in Iran and the inability of traditional education to fulfill this demand have developed distance education in Iran -especially Payame Noor University, the major distance education university in this country. Knowledgeable and interested students with high academic aptitude is of great importance in this system of education because the students are exposed to a variety of information and advertisements forming their attitudes and experts believe that human beings' attitudes influence their behavior. This concept in distance education is of great importance because there is not face to face interaction and teaching in the classroom like traditional education in this system.

An attitude is a hypothetical construct that represents an individual's degree of like or dislike for an item. Attitudes are generally positive or negative views of a person, place, thing, or event—this is often referred to as the attitude object. People can also be conflicted or ambivalent toward an object, meaning that they simultaneously possess both positive and negative attitudes toward the item in question. The ABC model of attitude contain: affect, behavior, and cognition (Eagly, & Chaiken, 1995). The affective response is an emotional response that expresses an individual's degree of preference for a person, place, thing, or event. The behavioral intention is a verbal indication or typical behavioral tendency of an individual toward a person, place, thing, or event. The cognitive response is a cognitive evaluation of the entity that constitutes an individual's beliefs about a person, place, thing, or event. Most attitudes are the result of either direct experience or observational learning from the environment.

Allport (1935) believes that attitude is mental and neural state of readiness, organized through experiences, exerting a direct or dynamic influence upon the individual's response to all objects and situations with which it is related. Research data on students' attitude toward distance education can be grouped into these categories: attitude toward technology, teaching method, student-teacher interaction, student-student interaction, attendance or non-attendance at the university.

Studies show that the academic achievement of students and their success in university are influenced by the interaction between situational variables such as schedule, teaching methods, affective and physical conditions of the educational environment and also individual variables of learners such as their attitude toward educational issues and field of study (Brunstein & Maier, 2005). Bassey (2002) found that attitude had an important role in the prediction of students' academic achievement. Findings of Smith and Mcnelis (1993) showed that the students with negative attitude toward distance education had lower academic achievement in comparison with other students.

Most of studies emphasize that distance education is appropriate for adult students and those who cannot attend in traditional university due to various reasons and these students have positive attitude toward distance education (O' Lawrence, 2006; Sorensen, 1995). In the study done by Cragg, et al. (2003), nurses reported positive attitude toward distance education. Carswell, et al. (2000), Su, et al. (2005), and Tekinarslan (2008) found that male students had more positive attitude toward distance education than female ones. Moreover, in Tekinarslan's study (2008) the married students in comparison with single ones, employed students in comparison with unemployed ones, married students with a child or children in comparison with married ones without a child, and finally adult students (37-41 years old) in comparison with younger ones had more positive attitude toward distance education.

In addition to the aforementioned issues, the main problem of distance education system is some applicants who are not allowed to enter the traditional system of higher education because they have not obtained the academic requirement necessary to enter this system or cultural and social limitations prevented them.

This paper is going to answer these questions:

- How is the attitude of students seeking for higher education toward distance education?
- Is there any difference between male and female students in their attitude toward distance education?

2. Method

2.1. Participants

The statistical population of this research consisted of the students in the last year of high school and university applicants who participated in the reinforcement classes and in the preparation for University Entrance Examination institutes in the city of Ardebil in the 2009-2010 academic years. Using random cluster sampling, 408 students (152 male and 256 female students) were selected based on Krejcie-Morgan table and taken into the estimated standard error 0.05.

2.2. Materials

The attitude questionnaire made up of 36 items rated on a 5-point Likert scale was used to collect data. The questionnaire was designed on the theoretical basis of attitude toward distance education and included cognitive, affective, and behavioral components. Each component had twelve favorable and unfavorable items about distance education. The reliability of the questionnaire in the pilot study was calculated using Cronbach's alpha. The overall reliability of the questionnaire was .86. The reliability of cognitive, affective, and behavioral components was .82, .75, and .78 respectively. They were appropriate values taken into account the number of questions.

2.3. Procedure

Research method was a survey study in which a sample with at least 100 subjects was adequate. Data were collected through field study in the preparation for University Entrance Examination centers and institutes. They were analyzed using independent one-sample t-test and independent two-sample t-test.

3. Results

Attitudes of the subjects in the sample and the components of attitude are compared with the possible median. Each item was designed in 5-point Likert scale and each component included 12 items. Therefore, the conceptual mean for the components of attitude was considered (12×3=36) and for the overall attitude was considered (36×3=108).

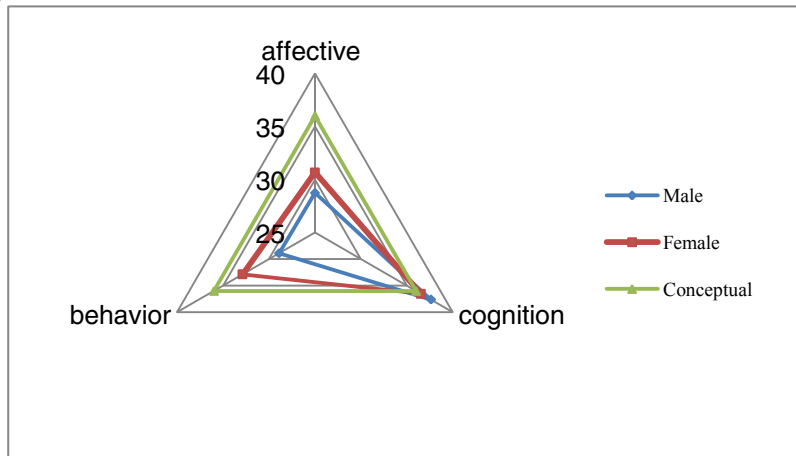


Figure 1. Mean score of males and females students' attitude toward distance education

Table 1. One-Sample statistics and t test for students' attitude

Components of attitude	gender	Mean (Std.deviation)	test value*	t	df.	Sig.	Effect size
Affective component	408	29.96 (7.2)	36	-17.02	407	.000	2.36
Cognition component	408	30.39 (8.9)	36	3.08	407	.000	0.35
Behavior component	408	36.94 (6.2)	36	-12.81	407	.000	2.07
Total (attitude)	408	97.3 (16.4)	108	-13.23	407	.000	0.81

As shown in table 1, $t_{(407)} = -13.23$, $P < 0.01$ indicated that attitude of students toward distance education (97.3 ± 16.4) was significantly lower than the conceptual mean (108). Moreover, the values of $t_{(407)} = -17.02$ and $t_{(407)} = -2.81$ showed that the mean score of the affective component (29.96 ± 7.2) and the behavioral component (30.39 ± 8.9) were significantly lower than the conceptual mean (36). However, $t_{(407)} = 3.08$ showed that the mean of the cognitive component (36.94 ± 6.2) was significantly higher than the conceptual mean (36).

Table 1. compare of male and female students' attitude

Components of attitude	gender	Mean (Std.deviation)	t	df.	Sig.	Effect size
Affective component	Female	30.68 (7.3)	2.66	407	.000	0.19
	male	28.74 (6.8)				
Cognition component	Female	36.52 (5.7)	-1.75	407	.000	0.14
	male	37.62 (6.7)				
Behavior component	Female	28.91 (7.80)	-4.47	407	.000	0.25
	male	32.87 (9.93)				
Total (attitude)	Female	95.58 (15.02)	-2.74	407	.000	0.08
	male	100.12 (18.13)				

According to table2, $t_{(406)} = 2.74$, $P < 0.01$ showed that the mean of the male students' attitude (100.12 ± 18.13) was significantly higher than the female students' attitude (95.58 ± 15.02) toward distance education. However, $t_{(406)} = 2.66$, $P < 0.01$ showed that the mean of the affective component of the female students' attitude

(30.68 ± 7.3) was significantly higher than the mean of the affective component of the male students' attitude (28.74 ± 6.81). On the other hand, $t_{(406)} = -4.47$, $P < 0.01$ showed that the mean score of the behavioral component of the male students' attitude (32.87 ± 9.93) was significantly higher than the mean score of the behavioral component of the female students' attitude (28.91 ± 7.80). There was no significant difference between the cognitive components of two groups.

4. Conclusion

Findings of present study showed that attitude of university applicants toward distance education are negative. This result is in compliance with the findings of O' Lawrence (2006), Sorensen (1995), and Tekinarslan (2008). So in these researchers indicated that attitude of young people toward distance education is lower than old people. According to Motamedi (2009) more than 90% of the P.N.U. students in B.C. are those who graduated from the high school in the past year (or maximum in two or three recent years). Therefore the majority of the P.N.U. students are young and they are not working anywhere. The needs of these groups of students are different from older students who both study and work.

Although the P.N.U. curriculum is different from the traditional university, the majority of the student expects to receive some educational services as like utilizing the library, laboratory, using the network information, on-line learning and interaction with the teachers, etc. Considering that most customers of Payam Noor University are young people who couldn't find traditional university entrance, this finding seems reasonable. Moreover, the findings showed that the mean score of the affective component and the behavioral component were significantly lower than the conceptual mean. However the mean score of the cognitive component was significantly higher than the conceptual mean.

Finally this research indicated that mean score of the male students' attitude was significantly higher than the female students' attitude toward distance education. This result was confirmed in some researches (Carswell, et al. 2000; Su, et al. 2005; & Tekinarslan, 2008). The findings of Omidian and Omidian (2009) showed that the best subset of predictors that can be used in modeling student's attitude to adapt e-learning includes: availability of resources, perceived of Usefulness, perceived ease of use, Pressure to use and the intention towards e-learning.

Hence, Program managers can focus on these factors that are expected to affect student's attitude to adapt e-learning. So field of study Brunstein and Maier (2005), Bassey (2002), Smith and Mcnelis (1993) found that attitude had an important role in the prediction of students' academic achievement.

References

- Brunstein, J. C., & Maier, G. W. (2005). Implicit and self-attributed motives to achieve: Two separate but interacting needs. *Journal of Personality and Social Psychology*, 89., 205-222.
- Carswell, L., Thomas, P., Petre, M., Price, B., & Richards, M. (2000). Distance education via the Internet: the student experience. *British Journal of Educational Technology*, 31(1), 29-47.
- Cragg, C. E., Edwards, N., Yue, Z., Xin, S. L. & Hui, Z. D. (2003). Integrating Web-based Technology into Distance Education for Nurses in China: Computer and Internet Access and Attitudes. *CIN: Computers, Informatics, Nursing*, 21 (5), 265-275.
- Eagly, A., & Chaiken, S. (1995). *Attitude strength, attitude structure and resistance to change*. In R. Petty and J. Kosnik (Eds.), *Attitude Strength*. (pp. 413–432). Mahwah, NJ: Erlbaum.
- Motamedi, A. (2009). *Educational conditions of Payame Noor University (P.N.U.) in Iran and its developmental strategies*. The 23rd Annual Conference of Asian Association of Open Universities, 3-5 Nov. 2009, Payame Noor University, Tehran-Iran.
- O'Lawrence, H. (2006). The influences of distance learning on adult learners. *Techniques: Connecting Education & Careers*, 81 (5), 47-49.
- Omidian, F.; Omidian, A. (2009). Examining students' attitudes to adopt E-learning in Iran. The 23rd Annual Conference of Asian Association of Open Universities, 3-5 Nov. 2009, Payame Noor University, Tehran-Iran.
- Smith, D.L. & McNelis, M. J. (1993). *Distance Education: Graduate Student Attitudes and Academic Performance*. ERIC Document Reproduction Service No: ED 360 948.
- Sorensen, C. K. (1995). Evaluation of interactive television instruction: assessing attitudes of community college students. *DEOSNEWS*, 5(9). [Online] Retrieved December 20, 2006 from http://www.ed.psu.edu/ACSDE/deos/deosnews/deosnews5_9.asp
- Su, B., Bonk, C. J., Magjuka, R. J., Liu, X., & Lee, S. (2005). The Importance of Interaction in Web-Based Education: A Program-level Case Study of Online MBA Courses. *Journal of Interactive Online Learning*, 4(1). [Online] Retrieved 24 December, 2006, from <http://www.ncolr.net/jiol/issues/PDF/4.1.1.pdf>
- Tekinarslan, E. (2008). Attitudes of Turkish distance learners toward internet- based learning: An investigation depending on demographical characteristics. *Turkish Online Journal of Distance Education*. 9(1), 39-47. ISSN 1302-6488.