Relationship between Student Satisfaction and Learning Style of Distance Learner: A Case Study of AIOU, Islamabad

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Abstract

The study aimed to find out relationship between satisfaction and learning style of distance learners enrolled at M.Ed. program at Allama Iqbal Open University Islamabad. It was a co relational study and was carried out by selecting a sample of 351 students through stratified random sampling procedure. Students' satisfaction was measured by using student Satisfaction Survey developed by Strachota (2006) while their learning style was assessed using Grasha-Riechmann Student Learning Styles Scale.

It was found that learning style components were positively correlated with students' satisfaction except avoidant learning style which was negatively correlated with components of satisfaction. Steps may be taken to develop collaborative and participant learning styles in distance learners. Learners maybe encouraged to increase interaction with each other. Distance learning tutors should be trained for better interaction and communication with students.

Keywords: Satisfaction, learning style, interaction, distance learners

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Introduction

Learning is a process that brings together cognitive, emotional, and environmental influences for acquiring, enhancing, or changing one's knowledge, skills, and values. Learning is an important activity and is central to the educational process. "Learning is an interactive process that occurs in a specific environment" (Hamidah, Sarina, and Kamaruzaman, 2009, p.58). Many variables like teacher's characteristics, student's characteristics, learning environment, and course content and subjects taken can affect the learning process.

Education and learning is important for cultural, moral socioeconomic and political development of a nation. Distance education is performing the same functions and many open universities have been established throughout the world. Educational opportunities are increasingly being made available to students through distance education who do not live near institutions of higher learning. It has given rise to the need for improved quality in distance education especially with regard to students' satisfaction and learning styles.

Students' satisfaction may be related to their learning styles. Students may enroll in distance education program based on their learning preferences. Student success in distance education may, therefore, depend on understanding their learning style and satisfaction. These areas need further exploration in Pakistani context as the instructors, the course designers, and the students need further knowledge of these areas and can also help universities to improve their distance learning programs.

Review of Literature

Satisfaction is "the extent to which one enjoys a class" (Bennett, 2001, p.12). Cultural differences influence the level of students' satisfaction regarding their perception of the services (Tian & Wang, 2010). Satisfaction includes issues of perception and experiences of students and is shaped by repeated experiences on campus (Ilias, Hasan, Rahman, and Yasoa, 2008). Institutions of higher education are emphasizing student satisfaction because of competitive pressures. Student satisfaction is related to recruitment, retention, and academic success. Universities are paying attention to such factors to attract students and create a supportive learning environment. Understanding and meeting these expectations are important to develop effective

learning environments. Student satisfaction builds self-confidence which helps students become more confident, develop useful skills, and acquire knowledge in a virtuous cycle (Letcher and Neves, 2010).

Students have their own style of learning that may vary from situation to situation. Learners prefer different learning styles, have different motivation for learning, and also differ in confidence, and pace of study. A better awareness of learning style can lead to better learning (Kanninen, 2009). According to Vaishnav (2013) learning style is a set of factors, attitude and behaviors that facilitate students' learning in a given situation. It is the ability of learners to perceive and process information. Learning style is the cognitive, affective, social, and physiological behaviors that provide a relatively stable indicator of how learners perceive, interact with, and respond to the learning environment. Learning styles influence how students learn and are influenced by personal experiences, culture, maturity level and development. Each learner has distinct and constant preferred ways of organization, perceptions, and retention.

Grasha and Riechmann (1999) have reported various learning styles including competitive learning styles, collaborative learning style, and avoidant learning style, participant learning style, dependent learning style, and independent learning style. Hsiao, Yang, Huang, and Zhu (2008) also endorsed these six types of learning style. Individual learning styles differ and play important role in the area of education. Learning style is closely related to cognitive style, however, it is best regarded as an extension to cognitive style to distinguish learning from simple processing of information (Logan and Thomas, 2002). Therefore, there is need to understand student satisfaction and learning styles. Various research studies have been conducted for the purpose.

Researches about Satisfaction and Learning Style

Studies about the relationship between learning style and satisfaction are mixed. Diaz and Cartnal (1999) found that students who enrolled in the distance education were significantly more independent learners than the equivalent on-campus students. On campus students were significantly more dependent learners than distance education students. Thus, on-campus students' favored collaborative styles as that it helped them to get the rewards of the class. On the other hand, online students were willing and able to work in collaborative teaching styles if the teacher made it clear that this was expected, and gave them form and

guidance for the purpose. Online students were driven more by intrinsic motives and not by the reward structure of the class.

Simon (2000) presented that students whose learning style matched training methodology were more successful in learning outcomes, reported higher satisfaction, and higher level of computer use. Hong (2002) found that learning styles and perceptions of student–student interactions and course activities were not related to satisfaction and achievement. Students who perceived the student –instructor interactions positively performed well, and were more satisfied with the course. Students also expected instructor-led learning. Banwet and Datta (2003) found that it was probable for satisfied students to attend another lecture delivered by the same lecturer or opt for another course taught by him/her.

Garland and Martin (2005) found a difference in the learning style of the online student and the student in the face-to-face course and that gender was a factor in the relationship between learning style and student engagement. When designing online courses the learning style and gender of students must be considered. Batista and Cornachione (2005) found that various learning styles as presented by Kolb were present in their sample but found no evidence of individual learning style influence on satisfaction and learning.

Erwin (2008) found no significant relationship between learning style and satisfaction; however the number of years learners spent in the program had a significant relationship with learners' satisfaction. Overall student satisfaction was medium to low.

Meyers (2010) reported that majority of students had the combination of learning preferences. However no significant relationship was found between a student's learning style and satisfaction with online education, but a relationship existed between course satisfaction and instructor satisfaction. Gurpinar, Alimoglu, Mamakli, and Aktekin (2010) reported that assimilating learning style predicted student satisfaction and success in theoretical exams. Aliweh (2011) found that gender had some effect on students' learning style preferences, but had no effect on students' satisfaction.

Lees (2011) reported significant relationships between the Active/Reflective and Sequential/Global learning style students toward training content. Significant relationships were found between gender and satisfaction toward training method and training content with male students showing greater satisfaction. Similarly significant relationship was found for the Visual/Verbal subgroup between learning style and training format and faculty satisfaction toward overall training. Training

method was strongly correlated to satisfaction than learning style for subgroups of Active/Reflective, Sensing/Intuitive, and Sequential/Global students

Cox and Tsai (2013) reported that the learning preferences of students were balanced learners in the active-reflective and the sequential-global dimensions. They also found that the sensing-intuitive dimension of learning preferences was a strong predictor of students' learning satisfaction.

Objectives of the Study

The main objectives of the study were;

- To explore the satisfaction of distance learners.
- To determine the learning styles of the distance learners
- To find out the relationship between satisfaction and learning style of distance learners.

Hypotheses of the Study

The following were the hypotheses of the study.

- H_{o.} There is no significant relationship between satisfaction and learning style of distance learners.
- H_{1.} There is a significant relationship between satisfaction and learning style of distance leaners.

Methodology of the Study

It was a co relational research designed for exploring relationship between the variables.

Population and Sample

The population for this study was students of M.Ed. program of Allama Iqbal Open University Islamabad. The population comprised of 3529 students enrolled in the core courses of the M.Ed. program offered by the university. A sample of 351 students was selected through stratified random sampling procedure as sample for the purpose of study.

Instrumentation

Satisfaction of distance learners was measured by using Student Satisfaction Survey developed by Strachota (2006) while their learning style was assessed by using Grasha-Riechmann Student Learning Styles Scale. A pilot test was conducted for establishing reliability and validity of instruments. The Cronbach's alpha for items on the scales ranged from 0.70 to 0.87 showing internal consistency of the items.

The instruments were administered by post. Pearson Product Movement Coefficient of Correlation were used for determining relationship between variables. Computer software programs like IBM SPSS statistics 21 for Windows and Microsoft's Excel 2007 professional were used for statistical analyses.

Major Findings, Analysis and Interpretation of Data

Table 1 Relationship between learning style and satisfaction (N=283)

		1	2	3	4	5	6	7	8	9	10	11
1	Independent		022	.047	.093	.188*	.235*	.112	.092	.143*	.221*	.131*
2	Avoidant			151 [*]	.228*	.173*	157*	234*	248*	305*	.100	262 [*]
3	Collaborative				.356*	.486*	.175*	.198*	.384*	.246*	.323*	.233*
4	Dependent					.473*	.418*	.169*	.419*	.156*	.261*	.295*
5	Competitive						.406*	.164*	.283*	.126*	.138*	.157*
6	Participant							.410*	.333*	.296*	.210*	.479*
7	Learner								.390*	.322*	.140*	.467*
	content											
	interaction											
8	Learner									.529*	.176*	.539*
	instructor											
	interaction											
9	Learner-										.096	.303*
	learner											
	interaction											
10	Learner											.126*
	technology											
	interaction											
11	General											
	satisfaction											
	*. Correlation is	s siar	nificant at	the 0.05	level							

p<0.05

The Table showed that various learning styles were positively correlated with each other with the exception that avoidant learning style was negatively correlated with collaborative and participant learning styles. Similarly components of satisfaction were positively correlated

with each other with the exception that learner-learner interaction was not correlated with learner technology interaction.

The table also showed that independent learning style was not correlated with learner-content interaction (r=0.112, p<0.05) and learner instructor interaction (r=0.092, p<0.05) but positively and significantly correlated with learner-learner interaction (r=0.143, p<0.05), with learner-technology interaction (r=0.221, p<0.05), and with general satisfaction (r=0.131, p<0.05). Avoidant learning style was negatively correlated with learner-content interaction (r=-0.234, p<0.05), and negatively correlated with learner-instructor interaction (r=-0.248, p<0.05), and also negatively correlated with learner-learner interaction (r=-0.305, p<0.05), and also with general satisfaction (r=-0.262, p<0.05)but it was not correlated with learner-technology interaction (r=0.100, p<0.05). Collaborative learning style was positively and significantly correlated with learner-content interaction (r=0.198, p<0.05), learnerinstructor interaction (r=0.384, p<0.05), learner-learner interaction (r=0.246, p<0.05), learner-technology interaction (r=0.323, p<0.05), and also with general satisfaction (r=0.233, p<0.05). Similarly Dependent learning style was positively and significantly correlated with learnercontent interaction (r=0.169, p<0.05), learner-instructor interaction (r=0.419, p<0.05), learner-learner interaction (r=0.156, p<0.05), learnertechnology interaction (r=0.261, p<0.05), and also with general satisfaction (r=0.295, p<0.05). Furthermore Competitive learning style was positively and significantly correlated with learner-content interaction (r=0.164, p<0.05), learner-instructor interaction (r=0.283, p<0.05), learner-learner interaction (r=0.126, p<0.05), learnertechnology interaction (r=0.138, p<0.05), and also with general satisfaction (r=0.157, p<0.05). Participant learning style was also positively and significantly correlated with learner-content interaction (r=0.410, p<0.05), learner-instructor interaction (r=0.333, p<0.05), learner-learner interaction (r=0.296, p<0.05), learner-technology interaction (r=0.210, p<0.05), and also with general satisfaction (r=0.479, p<0.05).

The bivariate correlation results indicated that there was significant positive correlation between learning style and satisfaction with the exception that avoidant learning style was negatively correlated with various components of satisfaction. Therefore, research hypothesis that there is a significant relationship between satisfaction and learning styles of distant learners was accepted with the exception that avoidant learning style was negatively correlated with various components of satisfaction while null hypothesis was rejected.

Conclusion

Learning style components were mostly positively and significant correlated with components of satisfaction except avoidant learning style which was negatively correlated with components of satisfaction.

Discussion and Recommendation

Teacher with understanding students' learning styles can adapt their teaching to students with different learning styles. These teachers can motivate student learning. The students who know their own learning style become better learners and develop more positive attitudes about their studies (Orhun and Orhun, 2007). The learning styles that identified in Grasha-Riechmann Learning Style Scale can at as a guideline for teachers in ensuring that their teaching and learning sessions are suitable for their students. (Khalid, Mokhtar, and Omar et,al., 2013). Educational psychologists need to develop insights into the different learning styles. If students can be enabled to be more aware of themselves and the ways in which they are likely to achieve better, they can be encouraged to develop effective and flexible learning styles. (Jilardi, Mahyuddin, Elias, Daud, and Shabani, 2011) as individual learning styles differ and play important role in the area of education.

Teachers should know the usefulness of learning styles for effective learning. The learning styles do not change with subjects, where it plays an important role across all the subjects. Successful learner learns in different ways. However, students with one or two learning styles can improve when taught through different learning styles (Abidin, et.al. 2011). The researcher took the psychological dimension of the learning-styles while the physiological and sociological dimensions were not explored. A reason behind it was that satisfaction is also a psychological phenomenon which varies from person to person. A person may be satisfied with one thing while another person might not be satisfied with the same thing. Furthermore physiological and psychological aspects are not completely different but are two sides of a coin-each coin completing and giving meaning to the other. It is worthwhile to investigate the issue for other courses in different settings.

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