Learner Satisfaction on Blended Learning

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Abstract

This paper focuses on learner satisfaction as a measure of quality of blended learning. Blended learning combines multiple delivery media that are designed to complement each other and promote learning and application-learned behavior (Singh, 2003). In other words blended learning is defined as a method of educating-at-a-distance that utilizes technology (high-tech, such as television and the Internet or low-tech, such as voice mail or conference calls) combined with traditional (or, stand-up) education or training (Smith, 2001).

The aim of using blended learning approaches is to find an harmonious balance between online access to knowledge and face-to-face human interaction. The balance between online and face-to-face components will vary for individuals. Some blended courses will include more face-to-face than online strategies. Other courses will tip the balance in favor of online strategies, using face-to-face contact infrequently. Still others will mix the two forms of instruction somewhat equally. Some may emphasize asynchronous student-to-student contact while others will require significant amounts of synchronous interaction The aim in either case is to find that harmonious balance- the balance of instructional strategies that is tailored specifically to improve student learning (Osguthorpe and Graham, 2003).

Distance education has a strong background in Turkey and is recognized as a method of learning for all levels of education, except primary education (covering the years 1-5). The Ministry of National Education is responsible for all distance learning activities from kindergarten to secondary level. The Higher Education Council is responsible for the distance learning implementation in universities. There is a growing private sector offering especially IT courses via the internet. The other courses are related to project and time management, language teaching and as preparation for the university entrance examination, which is a regulation to enroll a program at university level in Turkey. On the other hand, distance learning is being used increasingly as a mechanism for professional development. Some courses offered by the universities are for the completion toward a BA degree.

Student satisfaction can be defined as the student's perception pertaining to the college experience and perceived value of the education received while attending an educational institution (Astin, 1993 cited in Bollinger, Martindale, 2004). Learner satisfaction is one of the key factors for the success of the programs. Moreover, participant satisfaction levels along with their performance and trust are indicators of the formation and leadership of virtual teams (Bruce, Avolio, and Surinder, 2003) in e-learning environments.

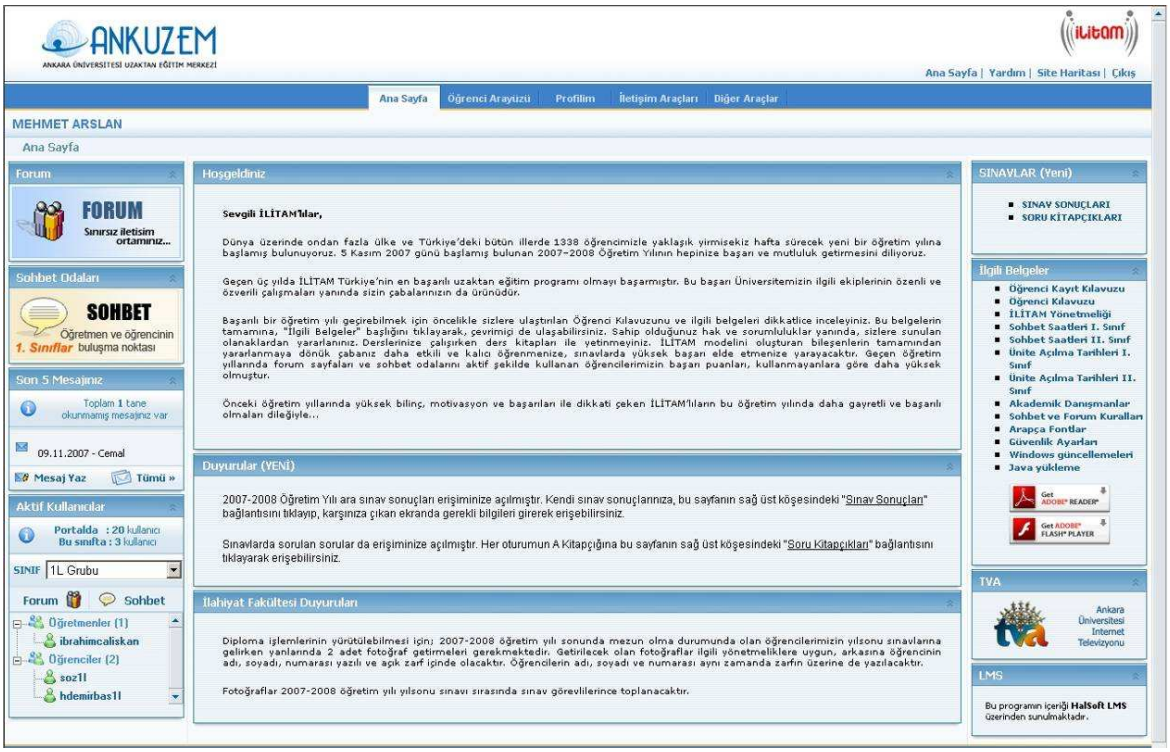
Leong, Ho and Ganne (2002) investigated the satisfaction of 128 students who enrolled in 29 online courses. The statistically significant dimensions were found as interaction, teacher, difficulty/work load and technology. In another study, Askar, Dönmez, Kizilkaya, Cevik, and Gültekin (2005) have argued that student satisfaction is a combination of several factors and proposed a model aggregating these factors into three groups: usability, instructional design, and implementation.

To summarize, student satisfaction is a combination of several factors and in this study a model is proposed by aggregation of these factors into six groups: learner –learner interaction, learner-teacher interaction, online environment, technical support, printed materials, face-to-face environment. Therefore, the aim of this study is to develop and validate an instrument related to learner satisfaction with regard to blended learner and to explore whether satisfaction differs according to gender and age.

Methodology

Study Setting

This study was carried out in a blended-learning environment offered by Ankara University Distance Education Center (ANKUZEM). ANKUZEM provides different diploma and certificate programs reaching to 78 provinces in Turkey and 13 different countries with an approximate number of 1200 students. The center utilizes web-based synchronous and asynchronous tools with two methods of information delivery, which are online and face-to-face environment supplemented by books and video. The screenshot of the online environment was given below.



Sample

The sample for this study included participants studying in a BA completion program for the Faculty of Theology in a blended learning program. The program is a two-year program with

a total of 8 courses in the first year and 7 courses in the second year. Total registered numbers of students to the program is 1338. The data were collected form 360 learners, 235 males and 125 females.

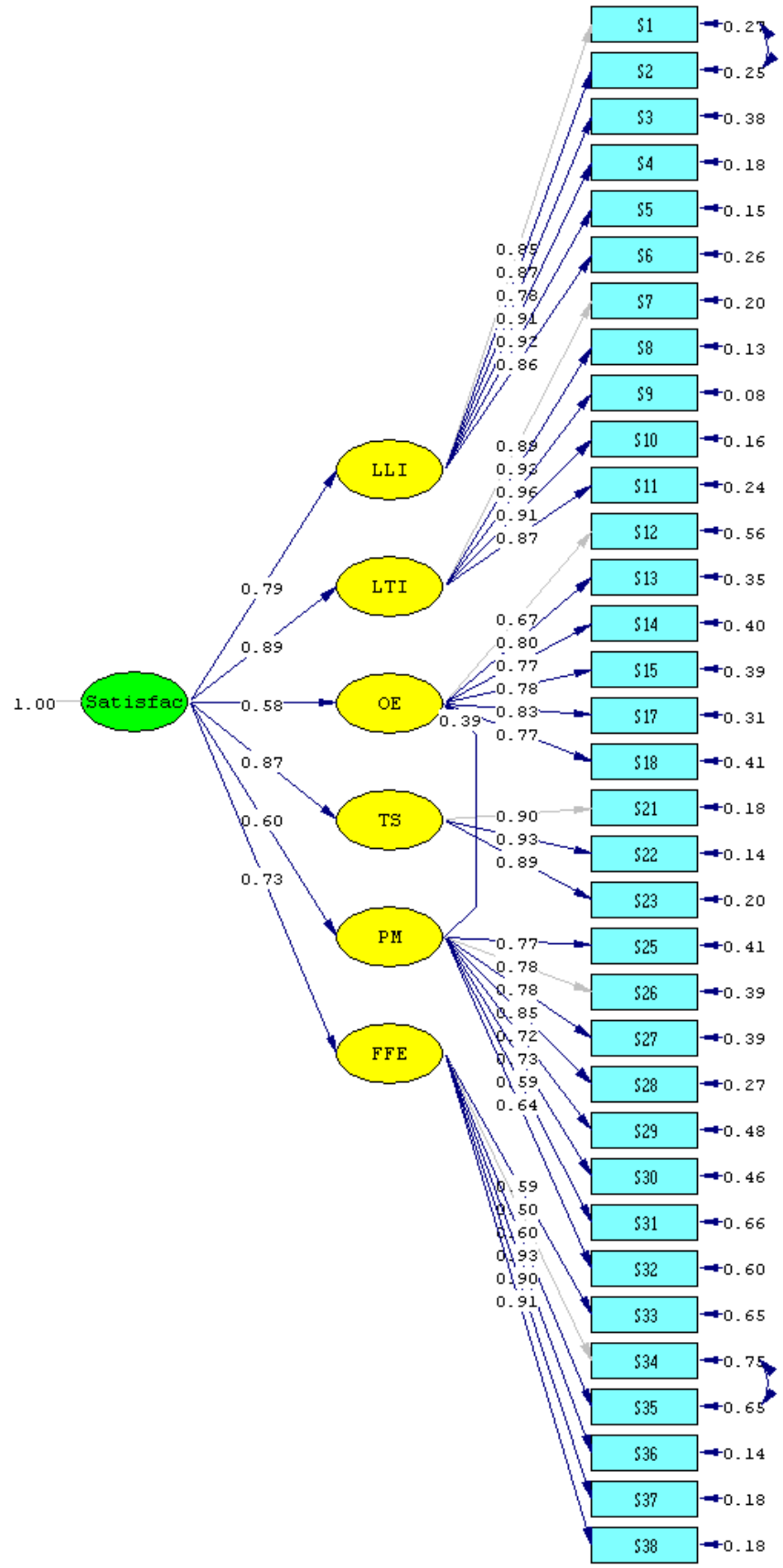
Data Collection Process

An instrument is designed to determine learners' satisfaction levels and to explore whether there is a difference in satisfaction levels according to their gender and age. The instrument included 34 items with six hypothetical factors as well as a section to obtain demographic data from the participants.

Results

Among the learners in the research group 35 % (125 people) are female, and 65 % (235) are male. The most populated group is 26-35 age groups with 153 respondents (42, 5 %). Then come under 25 (37, 5 %) and 36-45 age group (20 %).

A confirmatory analysis was performed. Confirmatory factor analysis (CFA) is a statistical technique used to verify the factor structure of a set of observed variables. CFA allows the researcher to test the hypothesis that a relationship between observed variables and their underlying latent constructs exists (Suhr, 2006). The learner satisfaction on blended learning instrument (SBLI) hypothesized six dimension-interaction (learner-learner and learner-teacher), online environment, technical support, printed materials and face to face environment which involve examinations. The goodness of fit indices (e.g. RMSEA= 0.066) showed that the model is good and the instrument could be used for the adult population.



Chi-Square=1338.43, df=518, P-value=0.00000, RMSEA=0.066

The reliability analysis results for each factor were provided in tables below.

Table 1:
Factor 1: Learner-Learner Interaction (LLI)

Item #	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
s1	22,32	80,318	,861	,938
s2	22,26	79,941	,875	,937
s3	22,84	81,591	,775	,949
s4	22,38	80,197	,875	,937
s5	22,23	79,734	,876	,936
s6	22,38	81,885	,809	,944

Cronbach's Alpha 0,95.

Table 2:
Factor 2: Learner-Teacher Interaction (LTI)

Item #	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
s7	18,29	57,854	,869	,957
s8	18,24	56,297	,906	,951
s9	18,22	56,413	,937	,946
s10	18,24	57,908	,897	,952
s11	18,36	58,224	,854	,959

Cronbach's Alpha 0,96.

Table 3:
Factor 3: Online Environment

Item #	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
s12	30,41	86,471	,620	,918
s13	30,29	83,868	,768	,901
s14	29,69	85,447	,745	,903
s15	29,81	84,005	,760	,902
s17	29,94	84,930	,783	,899
s18	30,32	85,956	,726	,905

Cronbach's Alpha 0, 90.

Table 4:
Factor 4: Technical Support (TS)

Item #	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
s21	9,56	13,467	,851	,911
s22	9,47	13,721	,887	,882
s23	9,37	14,160	,847	,913

Cronbach's Alpha 0,93.

Table 5:
Factor 5: Printed Materials (PM)

Item #	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
s25	36,70	93,067	,733	,886
s26	36,57	93,627	,722	,887
s27	36,50	94,841	,711	,888
s28	36,20	93,382	,786	,881
s29	36,30	95,426	,701	,889
s30	35,97	97,671	,699	,889
s31	36,55	96,092	,577	,901
s32	36,18	98,969	,616	,896
			Cronbach's Alpha	0,90

Table 6:
Factor 6: Face to Face Environment (FFE)

Item #	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
s33	27,40	58,140	,630	,888
s34	26,88	62,087	,587	,894
s35	27,02	59,158	,657	,884
s36	27,72	49,945	,841	,854
s37	27,77	50,700	,815	,859
s38	27,91	50,512	,778	,866
			Cronbach's Alpha	0, 89

The t-test and ANOVA were utilized in order to determine the differences according to gender and age. No statistically significant differences were found between females and males with respect to satisfaction on blended learning (t= 0,487 p>0.05); however female scores were statistically higher than the males for the face to face environment (t= 2,265 p= 0,024). No statistically significant differences were found between ages with respect to satisfaction and the factors (F= ,049 p>0.05) .

Conclusion

This paper aims to develop an instrument about the satisfaction on blended learning. The confirmatory factors analysis confirmed that there were six factors related to satisfaction. This finding supports the idea that learner satisfaction on online courses depends on several factors. Since blended learning combines traditional and online environments, the instrument reflects all the aspects of it.

In addition, it is worth mentioning that personalization of e-learning environment opens a new venue for researchers to explore individual differences regarding satisfaction and e-leadership. However assessing individual differences are not quite easy and the existing scales were developed for traditional teaching-learning environments. Therefore, future research is needed for identifying learning styles and strategies on Web environments.

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