PREDICTORS OF VOCATIONAL COLLEGE STUDENTS' BEHAVIORAL INTENTION TO USE WEB-BASED LISTENING TEST

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Abstract: Higher Education Institutions extensively use web-based testing applications to support their teaching and learning activities. Despite myriad benefits of these applications, students and institutions do not take full advantage of web-based testing applications due to a number of factors influencing behavioral intention. The purpose of this study was to examine vocational college students' behavioral intention of a web-based listening test administered in a vocational collage. The participants of the study comprised 929 post-secondary students enrolled in an "English Foreign Language" course during 2015-2016 fall semester. Computer Based Assessment Acceptance Model was adopted to determine predictors of participants' behavioral intention to use web-based listening test. The data were collected via an online questionnaire and analyzed using Pearson correlation coefficients and linear regression analyses. The results of the study revealed that students' behavioral intention to use web-based listening test had significantly positive relationship with their computer self-efficacy, facilitating conditions, social influence, goal expectancy, content of the test, perceived ease of use, perceived usefulness and perceived playfulness. Results also showed that social influence, goal expectancy, perceived usefulness, perceived ease of use and perceived playfulness exerted a direct influence on behavioral intention to use web-based listening test. Students' perceived playfulness appeared to be the strongest predictor of their behavioral intention to use within the web-based listening test.

Keywords: Web-based listening test, technology acceptance, vocational college, EFL course, online testing

Introduction

Technological advancements are booming more and more rapidly these days and every aspect of our lives is affected by developments in information systems. As a consequence of this fascinating transformation, roles and characteristics of each of stockholder in educational settings also change. As "digital natives", today's students think and process information in a different way, making it difficult for them to succeed in a traditional teaching and learning environment (Prensky, 2001). Students' frequent use of computers and the Internet have given rise to integration of more technology into educational practices including testing.

Web-based testing (WBT), which has become an alternative to traditional assessment practices in all educational settings, is related to the conceptualization and administration of assessments as a sophisticated way of using web technologies (Cigdem & Oncu, 2015) with the aim of expanding educational assessments in universities, schools or other industry. The reason behind its popularity is that an increasing number of faculty members have started to realize the benefits of creating, implementing, and managing assessment as a part of learning management systems (Llamas-Nistal et al. 2013).

A brief review of literature reveals numerous advantages of WBT for both test-developers and test-takers. Among those are flexibility of time and place, enhanced resource use, immediate and real-time feedback, high

interaction with test-takers, quick results and real-time score reports, automated grading and reporting, easier data management, cost reduction, efficiency in managing, setting, and delivering of exams, time-saving evaluation of learners' strengths and weaknesses, and learners' self-evaluation (Abedi, 2014; Bull & McKenna, 2004; Chou, Moslehpour, & Huyen, 2014; Cigdem & Tan, 2014; Llamas-Nistal et al. 2013; Morris 2008; Terzis, Moridis, & Economides, 2013; Zakrzewski & Steven, 2000). WBT is seen as a noteworthy method for instructors, because it aims to optimize the goals and techniques of teaching and testing in shorter times (Pino-Silva, 2008) and the delivery or administration of the assessment is not supposed to be at a fixed time or place (Cigdem & Oncu, 2015; Jeong, 2014).

Several research studies reveal that an increasing number of educational settings adopt or use WBT systems to deliver and manage their assessment procedures more efficiently and conveniently. However, there is a need to see the effects of WBT more in different disciplines, at different levels with varying body of participants. Since language testing is one of those settings, a study on the factors that are likely to influence learners' intention to use WBT systems can yield similar or different results. Additionally, even though WBT systems are thought to be useful in the realm of language testing, whether such systems are preferred over paper-pencil assessment procedures is not clear enough (Pino-Silva, 2008).

The main goal of this study was to examine the constructs that influence students' behavioral intention to use WBT in a vocational college.

Methods

This study was conducted in a compulsory English Foreign Language course taught in a vocational college during 2015-2016 fall semester. Participants of the study were 929 students from different departments whose ages ranged from 17 to 23 and who took two summative web-based listening tests during the semester.

The data were collected through an online questionnaire, adapted from the Computer Based Assessment Acceptance Model (CBAAM) (Terzis & Economides, 2011), which comprised 31 five-point Likert-type items with responses from 5 (strongly agree) to 1 (strongly disagree) and administered in Turkish using learning management system. The underlying structure of the questionnaire included nine factors representing learners' computer self-efficacy, facilitating conditions during WBT, social influence, content of test, goal expectancy, learners' perceived playfulness, perceived ease of use and perceived usefulness of the WBT, and learners' behavioral intention to use WBT. Responses of participants in the questionnaire were analyzed through inferential statistics. In order to see the relationships and correlations between the constructs within the research design, Pearson correlation coefficients were computed and linear regression analyses were performed to examine the points addressed in the research aim.

Results and Findings

The correlations between dimensions of CBAAM and students' behavioral intention to use web based listening test were presented in Table 1. Simple correlations of all the variables in the study revealed that students' behavioral intention to use WBT were significantly correlated with all other dimensions of CBAAM ($p < .005$). The strongest correlations indicated that the perceived playfulness and perceived usefulness of the system tended to increase behavioral intention to use of the WBT.

Table 1. Correlations between behavioral intention to use WBT and dimensions of CBAAM

	Computer Selfefficacy	Facilitating Conditions	Social Influence	Goal Expectancy	Content	Perceived ease of use	Perceived usefulness	Perceived playfulness
Behavioral Intention	.357*	.421*	.586*	.564*	.586*	.572*	.655*	.732*

* Correlation is significant at the 0.01 level (2-tailed).

The final analysis was performed to examine the predictors of the learners' behavioral intention to use the WBT. Hence, the all constructs of CBAAM tested. The result was significant, $R^2 = .606$, $F(8,920) = 176.595$, $p < .001$. Perceived playfulness from the system was found to have the greatest significant effect on the students' behavioral intention to use WBT. In addition perceived usefulness, perceived ease of use, social influence and goal expectancy tended to exert significantly positive influences on behavioral intention to use WBT, whereas computer self-efficacy and content seemed to have no significant effect (see Table 2).

Table 2. Dimensions of CBAAM as predictors of behavioral intention

Dimension	B	SE	β	t	p
Perceived Usefulness	,254	,042	,196	6,008	,000
Perceived Ease of Use	,107	,045	,075	2,403	,016
Computer Self-Efficacy	,032	,033	,025	,977	,329
Social Influence	,114	,035	,097	3,311	,001
Facilitating Conditions	,103	,057	,047	1,799	,072
Content	,007	,039	,006	,186	,852
Goal Expectancy	,131	,047	,082	2,798	,005
Perceived Playfulness	,429	,037	,409	11,568	,000

Conclusion

The main purpose of the present study was to examine the constructs that influenced students' behavioral intention to use WBT in the assessment of language skills. Apart from this, specifically on the basis of previous literature, CBAAM and language testing itself, answers were sought for some questions related to the relationships among the main variables that constitute CBAAM.

Looking into the correlational analyses between the dimensions of CBAAM and students' behavioral intention to use WBT, it was found that all dimensions of CBAAM were significantly and positively correlated with behavioral intention to use WBT.

The present study confirmed that social influence, goal expectancy, perceived ease of use, perceived usefulness, and perceived playfulness had a positive impact on behavioral intention to use WBT. An explanation may be that students are willing to use or take part in WBT as long as it is easy to use, is useful, and joyful.

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