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

**Tolga ERDOĞAN<sup>1</sup> , Harun ÇİĞDEM<sup>2</sup> , Osman Gazi YILDIRIM<sup>3</sup>**

**Abstract**

As technological advancements are increasing these days, there is a growing interest in the use of web technologies within testing applications that support teaching and learning processes in all educational domains. One of the factors that is believed to influence such applications is learners' behavioral intentions to use technology. This study has a purpose of examining the constructs that are directly or indirectly affecting participants' behavioral intention to use listening exams delivered web-based in the 2015-2016 academic year in a 'Foreign Language' course with the participation of 929 students. The acceptance model related with computer based assessment was utilized to examine the predictors of participants' behavioral intention. An online questionnaire was administrated to collect data and data were analyzed through linear regression analyses. The results of the research revealed that perceived usefulness was influenced by content of test, goal expectancy, perceived ease of use, and social influence. Additionally, facilitating conditions and computer self-efficacy significantly predicted perceived ease of use. Also, perceived playfulness was affected by content, goal expectancy and perceived usefulness. Finally, perceived ease of use, perceived usefulness, and perceived playfulness were found to induce direct effect on behavioral intention to use web-based listening test. As a result, web-based testing is expected to be utilized by participants if it is playful, useful, and ease to use and it is seen as playful when it is useful.

**Keywords:** online testing; web-based listening test; technology acceptance; behavioral intention; vocational college

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## Öz

Teknolojik gelişmelerde yaşanan artış sonucunda, tüm eğitim alanlarındaki öğretme ve öğrenme süreçlerini destekleyen test uygulamaları içinde web tabanlı teknolojilerin kullanılması konusuna ilgi gün geçtikçe artmaktadır. Bu tür uygulamaları etkilediğine inanılan faktörlerden biri, öğrencilerin teknolojiyi kullanma niyetleridir. Bu çalışma, 2015-2016 akademik yılında "Yabancı Dil" dersinde 929 öğrencinin katılımıyla yapılan web tabanlı dinleme sınavlarını ilişkin katılımcıların kullanma niyetlerini doğrudan veya dolaylı olarak etkileyen faktörleri incelemek amacıyla yapılmıştır. Bilgisayar Tabanlı Değerlendirme Kabul Modeli, katılımcıların kullanma niyetlerinin yordayıcılarını belirlemek için kullanılmıştır. Verilerin toplanması için çevrimiçi bir ölçek uygulanmış ve veriler doğrusal regresyon analizleri ile analiz edilmiştir. Araştırmanın sonuçları, algılanan yararlılığın, testin içeriği, hedef beklentisi, algılanan kullanım kolaylığı ve sosyal etki tarafından etkilendiğini ortaya koymuştur. Buna ek olarak, kolaylaştırıcı koşullar ve bilgisayar öz-yeterliliği algılanan kullanım kolaylığını önemli ölçüde yordamaktadır. Ayrıca, algılanan eğlencelik, içerik, amaç beklentisi ve algılanan faydalılıktan etkilenmiştir. Son olarak, algılanan kullanım kolaylığı, algılanan faydalılık ve algılanan eğlenceliğin, web tabanlı dinleme testi kullanma niyetleri üzerinde doğrudan etkilerinin olduğu bulunmuştur. Sonuç olarak, kullanıcılar web tabanlı testleri eğer eğlenceli, kullanışlı ve kolay kullanılabilir olarak algıarlarsa kullanmaktadırlar.

**Anahtar Kelimeler:** çevrimiçi test; web tabanlı dinleme testi; teknoloji kabulü; davranışsal niyet; meslek yüksekokulu

## Geniş Özet

Yaşanan teknolojik gelişmeler sonucunda, bilgisayar ve web tabanlı teknolojilerin kullanımı tüm alanlarda olduğu gibi eğitim alanında da artış göstermektedir. Özellikle sayısal yerli olarak tanımlanan bugünün öğrencilerinin internet teknolojilerini düzenli bir şekilde kullanmaları bu teknolojilerin eğitim alanında kullanmalarını kolaylaştırmaktadır.

Web tabanlı test sistemleri de geleneksel değerlendirme yöntemleri yerine kullanılabilir bir seçenek haline gelmiştir. Birçok öğretim elemanı kurumlarında kullanılan öğrenme yönetim sistemlerinin soruları oluşturma, sınavları uygulama ve değerlendirme yapma özelliklerini kullanarak web tabanlı testler uygulamanın basit olduğunu görmüşlerdir.

Birçok alanda olduğu gibi yabancı dil öğretiminde de web tabanlı testlerin güçlü yönleri zamandan ve yerden bağımsız olması, ek materyal kullanımının basit olması, anında geribildirim vermesi, sınava girenleri ile etkileşimin artması, otomatik derecelendirme ve raporlama sunması, maliyetlerin düşmesi ve uygulamalardaki verimliliğin artması şeklinde açıklanabilir. Bunların yanında yabancı dil öğrenimi konusunda öğrencilerin güvenini, motivasyonunu ve etkileşimini olumlu yönde etkilemektedir.

Birçok araştırmacı yeni sistemlerin kabulü konusunda çalışmalar yapmaktadır. Bu çalışma askeri meslek yüksekokulu için yeni bir yöntem olan web tabanlı dinleme sınavının öğrencilerin kullanma niyetlerinin yordayıcılarını belirlemeyi amaçlamaktadır. Terzis ve Economides tarafından önerilen Bilgisayar Tabanlı Değerlendirme Kabul Modeli, alanyazında daha önce kullanılan Teknolojik Kabul Modeli, Planlanmış Davranış Teorisi ve Teknolojinin Kabul Edilmesi ve Kullanımı Birleşik Teorisi gibi modellere dayanmaktadır.

Araştırmada kullanılan modele göre eğer kullanıcılar yeni sistemi kullanışlı, eğlenceli ve kullanımı kolay olarak algıarlarsa kullanma niyetleri artacak ve testin içeriği de kullanma niyetlerini etkileyecektir. Sosyal etki, hedef ve testin içeriğinin yanında algılanan kullanım kolaylığı öğrencilerin algıladıkları kullanışlılığı etkileyebilirken, öğrencilerin bilgisayar özyeterliliği ve sınav ortamındaki kolaylaştırıcı durumlar sistem için algılanan kullanım kolaylığını etkilemektedir. Algılanan eğlencelik ise sistemin algılanan kullanışlılığından, algılanan kullanım kolaylığından, testin içeriğinden ve hedeflerden etkilenebilmektedir.

Bu araştırmada

- (1) Test sırasında öğrencilerin bilgisayar öz-yeterlik ve kolaylaştırma koşulları algılanan kolaylığı yordayabilir mi?
- (2) Öğrencilerin hedef beklentisi, sosyal etki, testin içeriği ve algılanan kullanım kolaylığı, algılanan yararlılığı yordayabilir mi?
- (3) Öğrencilerin hedef beklentisi, testin içeriği, algılanan kullanım kolaylığı ve algılanan yararlılık algıladıkları eğlenceyi yordayabilir mi?
- (4) Testin içeriği, algılanmış eğlencelik, algılanan kullanım kolaylığı ve algılanan yararlılık öğrencilerin web tabanlı testi kullanma davranış niyetlerini yordayabilir mi? Sorularına cevap aranmıştır.

Araştırma, Balıkesir'de bir askeri meslek yüksekokulunda yürütülmüştür. Katılımcıların tamamı erkek ve yaşları 17-23 arasında değişmektedir. İngilizce dersinde web tabanlı dinleme sınavını yapan 929 öğrenci çevrimiçi ankete yanıt vermiştir.

Öğrencilerin bir web tabanlı dinleme testini kullanmalarına yönelik davranışsal niyetlerini belirlemek için dokuz faktörden oluşan çevrimiçi Bilgisayar Tabanlı Değerlendirme Kabul Modeli ölçeği kullanılmıştır. Ölçeğin iç tutarlılığını saptamak her alt ölçek için Cronbach alfa değerleri hesaplanmıştır. Alt ölçekler için Cronbach alfa, .69'dan .95'e kadar değişmektedir. Ölçeğe verilen cevaplardan elde edilen veriler çıkarımsal istatistikler yoluyla analiz edilmiştir. Araştırma tasarımı içerisindeki faktörler arasındaki ilişkileri ve korelasyonları görmek için Pearson korelasyon katsayıları hesaplanmış ve araştırma soruları üzerinde ele alınan noktaları incelemek için doğrusal regresyon analizleri yapılmıştır.

Yapılan analiz sonuçlarına göre, bilgisayar öz-yeterliliği ve test ortamındaki kolaylaştırıcı koşullar, algılanan kullanım kolaylığının önemli yordayıcılarıdır. Öğrencilere, web tabanlı dinleme testi için yeterli eğitim, rehberlik ve destek verilirse ve sınıf içinde ve dışında sistemi test etmek için yeterli yer ve zamana sahip oldukları takdirde, web tabanlı dinleme testini daha kolay buluyorlar.

Bulgular aynı zamanda, test içeriğinin, hedef beklentisinin, kullanım kolaylığının ve sosyal etkinin de algılanan yararlılığı yordadığını ortaya çıkarmıştır. Öğrenciler, diğer öğrencilerin sistem hakkındaki düşüncelerinden etkilenerek web tabanlı test sistemini yararlı bulmuşlar. Bir başka bulgu, amaç beklentisinin, testin içeriğinin ve algılanan yararlılığın algılanan eğlencenin güçlü yordayıcıları olduğu, algılanan kullanım kolaylığının ise algılanan eğlenceyi yordamadığıdır. Bu bulgunun nedeni, askeri meslek yüksekokulundaki öğrencilerin bilgisayarlara her zaman erişememesi ve yeterli uygulama yapamaması gerçeğinden kaynaklanıyor olabilir.

Bu çalışma, web tabanlı dinleme testini kullanma niyetinin, algılanan kullanım kolaylığı, algılanan faydalılık ve algılanan eğlenceden olumlu etkilendiğini bulmuştur. Bu bulgular, web

tabanlı sınav uygulayıcılarına bazı yararlı sonuçlar vermektedir. Birincisi, yalnızca öğretim etkinlikleri sırasında değil, aynı zamanda değerlendirmelerde de bilgisayar kullanımı için öğrencilerin bilgisayar kullanımı hakkındaki öz yeterlikleri artırılmalı ve yeterince öğretim, deneyim, mekan ve zaman temin edilerek koşullar iyileştirilmelidir. İkincisi, web tabanlı testin içeriğinin, öğrencilerin memnuniyetinde önemli bir rol oynadığı ve algılanan yararlılığı etkileyen önemli bir değişken olduğu düşünülürse, web tabanlı sınavların içeriğine yeterince önem verilmelidir.

Bu çalışmanın bazı sınırlılıkları da vardır. Birincisi, ölçek yalnızca askeri bir meslek yüksekokulunda öğrenim gören öğrenciler tarafından tamamlandığından, bulgular diğer yerleşimlere ve toplumlara genelleştirilemez. İkincisi, tüm katılımcıların erkek olması gerçeğidir. Üçüncüsü, sonuçlar web tabanlı testin yabancı dil dersinde uygulanmasından elde edildi. Web tabanlı testin başka bir derste veya konuda uygulanması, farklı sonuçlar ortaya koyabilir.

## Introduction

As technological advancements are increasing more and more rapidly these days, computer and internet use has become widespread everywhere, including educational settings as well. 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' regular use of the Internet technologies has given rise to integration of more technology into educational practices including testing.

Web-based testing (WBT), which has become an option to conventional assessment preparation in all domains of education, is associated with the conceptualization and management of assessments by utilizing web technologies (Cigdem & Oncu, 2015). Today, more and more instructors have understood that simplicity of creating questions, implementing exams, and managing assessment in learning management systems (LMS) (Llamas-Nistal et al. 2013).

A brief review of literature reveals a list of benefits of WBT. Some of them can be exemplified as having flexibility in time and place, enhancement of material use, instant feedback, increased interactivity for test-takers, automated and effortless grading and reporting, reduction in costs, efficiency in applications, and setting the context for the assessment of learner strengths and weaknesses (Abedi, 2014; Chou, Moslehpour, & Huyen, 2014).

In many disciplines, including language instruction, web based assessment is thought to have positive influence on students' confidence, motivation, engagement and interaction (Alderson, 2000). Online testing is said to cost less, is more effective and can quantify some skills that may or may not be measured through paper-based tests (Hovland, 2005). Related research show positive contribution of web-based assessment to students' motivation and performance (Brantmeier, 2006; Chappelle, 2001; Choi, Kim & Boo, 2003; Cushion & Hémard, 2003).

On the other hand, many researchers have worked on the acceptance of new systems. The acceptance or behavioral intention to use a new system has been the focus of study in some main theories and more recently, the Computer Based Assessment Acceptance Model (CBAAM) (Terzis & Economides, 2011). Having its roots in previous models like Technology Acceptance Model (TAM) (Davis, Bagozzi, & Warshaw, 1989), the Theory of Planned Behavior (TPB) (Ajzen, 1991), the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh, Morris, Davis, & Davis, 2003), CBAAM was suggested by Terzis and Economides (2011).

The Perceived Usefulness is explained as "the level that a person thinks using a certain system would enhance his/her job performance within an organizational content" (Davis, 1989). Terzis and Economides (2011) hold that a useful WBT increases perceived playfulness.

The second outstanding construct of TAM (Davis, 1989), the Perceived Ease of Use, is explained as "the degree to which a person believes that using a particular system would be free of effort" (Davis, 1989). Some evidence proves the positive impact of perceived usefulness, perceived playfulness and perceived ease of use on behavioral intention (Venkatesh, 1999; Venkatesh & Davis, 1996).

Computer Self Efficacy (CSE), which is described as a person's perception of a competency to utilize computers (Compeau & Higgins, 1995), is recorded to have a direct

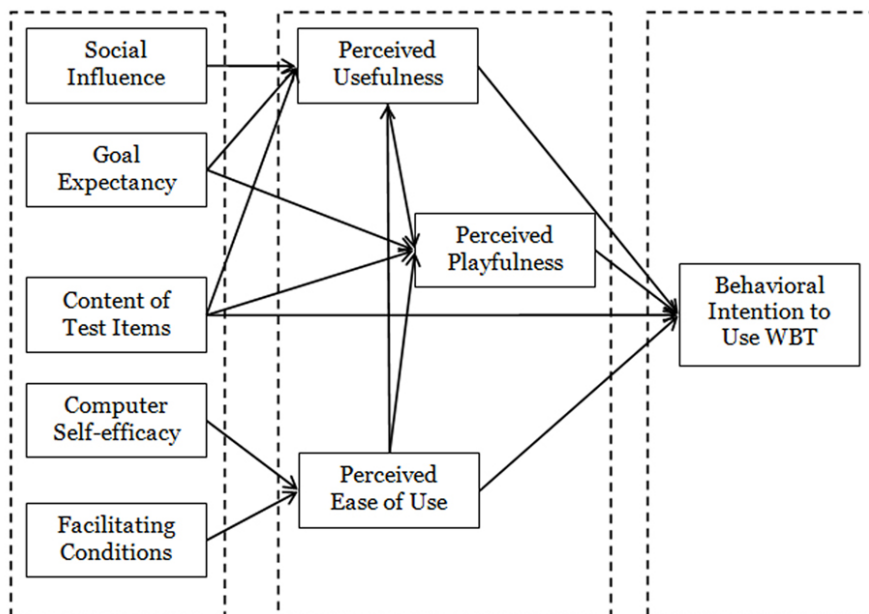
influence on perceived ease of use and an indirect influence on behavioral intention (Terzis & Economides, 2011). Research has shown that the level of familiarity with computers also has an effect on success during web based assessments (Brantmeier, 2006; Choi, et al., 2003; Liou, 2000).

Perceived Playfulness is described as “the pleasure the individual feels objectively when committing a particular behavior or carrying out a particular activity” (Moon & Kim, 2001). In their research, Moon and Kim (2001) and Terzis and Economides (2011) show the positive influence of perceived playfulness on behavioral intention to accept online technologies.

Social Influence represents the influence friends and superiors have on someone's beliefs (Fishbein & Ajzen, 1975). There is evidence on its positive effect on perceived usefulness in using web based environments (Cigdem & Topcu, 2015; Wang et al., 2009). Additional findings regarding indirect impact of social influence on behavioral intentions through perceived usefulness in WBT also exist (Terzis & Economides, 2011).

Facilitating conditions involve technical support (e.g. helpdesks and online support services) and time and money resources (Lu, Liu, Yu, & Wang, 2008). In the current study, facilitating conditions is supposed to have a positive influence on perceived ease of use.

Terzis and Economides (2011) introduced two more variables: goal expectancy and content of WBT. Goal Expectancy, the roots of which can be found in Self-Management of Learning (Wang, Wu, & Wang, 2009), has two dimensions that influence individuals' beliefs towards using WBT, learners' pleasure with both their studying and their appealing level of achievement in WBT contexts. In CBAAM, goal expectancy is believed to have a positive effect on perceived usefulness and perceived playfulness. Content refers to learners' perceptions of the content of WBT. Some evidence exists depicting its influence on some factors of CBAAM (Cigdem & Oncu, 2015; Terzis & Economides, 2011). CBAAM is illustrated in Figure 1.



**Figure 1.** Computer Based Assessment Acceptance Model

All research presented so far reveal different positive outcomes of WBT systems in various educational settings. Despite the importance of WBT systems and those research



findings, there remains a paucity of evidence on their efficiency and convenience in different settings. One of these settings that has been neglected is testing of foreign language proficiency and skills. Thus; building on the discussions and results of previous research mentioned above, the main aim of this study is to examine the constructs that affect the students' behavioral intention to use WBT in assessing language skills in a military vocational college. On the basis of previous literature on WBT, CBAAM and the significance of language testing, particularly the following research questions are to be answered within the scope of this study:

- (1) Can learners' computer self-efficacy and facilitating conditions during test predict perceived ease of use?
- (2) Can learners' goal expectancy, social influence, content of WBT and perceived ease of use predict perceived usefulness?
- (3) Can learners' goal expectancy, content of WBT, perceived ease of use and perceived usefulness predict perceived playfulness?
- (4) Can content of WBT, perceived playfulness, perceived ease of use and perceived usefulness predict learners' behavioral intention to use the WBT?

Different formats of WBT systems were utilized previously in various areas such as computer networking (Cigdem & Oncu, 2015), foreign language learning (Cigdem, Ozturk & Topcu, 2016; Fritz, 2003), undergraduate social psychology (Johnson & Kivinemi, 2009), introduction to psychology (Coulter-Kern, Fogle and Sibert, 2011) exercise physiology (Dobson, 2008), micro-economics (McCausland, 2003), dental sciences (Henly, 2003), physiology for biomedical sciences (De Kleijn et al, 2013), chemical engineering (Sorensen, 2013), mathematics (Zraggen, 2009), aerospace education (Skrabut, 2006) and biology (Orr & Foster, 2013). There is a need to study WBT systems in language teaching contexts. Additionally, the research setting, which is a post-secondary military vocational college, is thought to provide more significance to this study.

## **Method**

### **Participants**

The research was carried on a military vocational college in Balıkesir, Turkey, with students enrolling at vocational and administration programs. The participants were all male and their ages ranged from 17 to 23. 929 of students who took the English language listening e-exam responded to the online questionnaire.

### **Instrument**

An online questionnaire, in line with the variables included in CBAAM, was used to find out students' behavioral intention to use a WBT system. Hence, the questionnaire covered 31 five-point Likert-type items with responses from 5 (strongly agree) to 1 (strongly disagree) and it was administered in Turkish. The underlying structure of the questionnaire included nine factors as represented in Figure 1.

Cronbach's alpha was calculated for each subscale to ascertain the internal consistency of the questionnaire and see whether the items that were summed to create each factor formed a reliable scale. The alpha for the subscales ranged from .69 to .95. Except for facilitating conditions, all the values revealed reasonable levels of reliability (see Table 1).

**Table 1.** Results of reliability analyses

Subscale	Items	Cronbach's Alpha
Computer self-efficacy	4	.815
Facilitating Conditions	2	.688
Social Influence	4	.771
Goal Expectancy	3	.764
Content	4	.812
Perceived ease of use	3	.795
Perceived usefulness	3	.937
Perceived playfulness	4	.885
Behavioral intention	4	.866
TOTAL	31	.952

### Data Analysis

The data obtained from the responses 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 run to examine the points addressed in the research questions.

### Results

The examination of the correlations among all the factors represented in the scale, showed that all the nine factors were significantly correlated with each other and the correlations between factors were less than .90 (see Table 2). As a result, no multicollinearity problem among the predictor variables was assumed (Field, 2009; Kline, 2011; Tabachnick & Fidell, 2007).

**Table 2.** Pearson correlations among the factors

Factors	2	3	4	5	6	7	8	9
1. Computer Self-efficacy	.471*	.346*	.414*	.343*	.458*	.347*	.338*	.357*
2. Facilitating Conditions		.447	.445*	.497*	.452*	.387*	.415*	.421*
3. Social Influence			.473*	.574*	.526*	.595*	.640*	.586*
4. Goal Expectancy				.600*	.536*	.512*	.640*	.564*
5. Content					.607*	.603*	.684*	.586*
6. Perceived ease of use						.665*	.575*	.572*
7. Perceived usefulness							.684	.655*
8. Perceived playfulness								.732*
9. Behavioral intention								-

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

As for the first research question inquiring whether perceived ease of use could be predicted by the constructs of computer self-efficacy, and facilitating conditions during WBT, the regression analysis indicated a significant result,  $R^2=.531$ ,  $F(2,926)=181.646$ ,  $p<.001$ , computer self-efficacy and facilitating conditions during the WBT positively influenced the scores regarding perceived ease of use (see Table 3).

**Table 3.** *Computer Self-efficacy and facilitating conditions as predictors of perceived ease of use*

Variables	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>
Computer self-efficacy	0.290	0.029	0.315	9.979	.000
Facilitating Conditions	0.463	0.048	0.304	9.622	.000

For further analysis, content of WBT, goal expectancy, social influence, and perceived ease of use were checked to see whether they predict the construct of perceived usefulness. It revealed a significant result,  $R^2=.553$ ,  $F(4,924)=285.618$ ,  $p<.001$ , suggesting the fact that content of WBT, goal expectancy, perceived ease of use and social influence exerted positively significant effects on the scores pertaining to perceived usefulness of the system (see Table 4).

**Table 4.** *Social influence, goal expectancy, content of WBT, and perceived ease of use as predictors of perceived usefulness*

Variables	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>
Social Influence	.234	.026	.255	9.065	.000
Goal Expectancy	.100	.035	.081	2.818	.005
Content	.163	.029	.177	5.549	.000
Perceived ease of use	.420	.033	.380	12.861	.000

Regarding the third research question examining if perceived playfulness is predicted by the constructs of goal expectancy, content of WBT, perceived ease of use, and perceived usefulness, the regression analysis also demonstrated significant results,  $R^2=.629$ ,  $F(4,924)=392.381$ ,  $p<.001$ . Accordingly, it was seen that except for the perceived ease of use, all the others had a positive influence on the perceived playfulness scores (see Table 5).

**Table 5.** *Goal expectancy, content, perceived ease of use, and perceived usefulness as predictors of perceived playfulness*

Variable	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>
Goal Expectancy	.411	.040	.271	10.345	.000
Content	.342	.033	.300	10.471	.000
Perceived ease of use	.014	.040	.010	.343	.731
Perceived usefulness	.442	.035	.358	12.482	.000

The final regression analysis was run to find out the predictors of the learners' behavioral intention to use the WBT. Hence, the constructs of content, perceived ease of use, perceived usefulness and perceived playfulness were tested. The result was significant,  $R^2=.592$ ,  $F(4,924)=335.300$ ,  $p<.001$ . Perceived playfulness from the system seemed to have the greatest significant effect on the learners' behavioral intention to use the system. Additionally perceived usefulness and perceived ease of use tended to exert significantly positive influences on behavioral intention scores, whereas content seemed to have no significant effect (see Table 6).

**Table 6.** *Content of WBT, perceived ease of use, perceived usefulness, and perceived playfulness as predictors of behavioral intention*

Variable	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>
Content of WBT	.069	.037	.057	1.850	.065
Perceived ease of use	.170	.043	.119	3.958	.000
Perceived usefulness	.278	.042	.215	6.605	.000
Perceived playfulness	.501	.034	.477	14.620	.000

## Discussion

The current study aimed to investigate the factors 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.

The findings showed that computer self-efficacy and facilitating conditions were significant predictors of perceived ease of use. This supports the findings from previous research (Terzis & Economides, 2011). As Terzis and Economides (2011) purport, students find computer use easier if they are given enough training, guidance and support on procedures and if they are provided with enough room and time for use, both in and out of class.

The findings also suggest that content of test, goal expectancy, perceived ease of use and social influence positively predicted perceived usefulness. Students seemed to find WBT useful as long as this idea is shared and found important by other students or peers, is easy to use, helps them to achieve their goals, and its content is interesting, useful, but not difficult. Social influence was also found to be an important determinant of perceived usefulness in some other studies (Cigdem & Topcu, 2015; Terzis and Economides, 2011; Venkatesh & Davis, 2000). Other studies also confirmed the effects of goal expectancy (Terzis and Economides, 2011), content (Cigdem & Oncu, 2015; Lee, 2006; Terzis & Economides, 2011), and perceived ease of use (Terzis & Economides, 2011; Venkatesh, 1999; Venkatesh & Davis, 1996) on perceived usefulness.

Another finding was that goal expectancy, content and perceived usefulness was strong predictors of perceived playfulness, whereas perceived ease of use was not. This could be ascribed to the fact that students in the vocational college have hard times accessing the computers. There are some times when either the computers are not available at all or the number of computers is not enough for each individual learner.

The present study found that behavioral intention to use WBT was positively affected by perceived ease of use, perceived usefulness, and perceived playfulness. An explanation may be that students are ready to use or take part in WBT if it is easy to use, is useful, and joyful. Nevertheless, the findings support the results in other studies where perceived ease of use (Terzis & Economides, 2011; Venkatesh, 1999; Venkatesh & Davis, 1996), perceived usefulness (Cigdem & Oncu, 2015; Venkatesh & Davis, 2000), and perceived playfulness (Terzis & Economides, 2011) was suggested to have direct positive effect on behavioral intention.

## Conclusion

This study examined the factors that influenced the individual's behavioral intention to use WBT in a military vocational college. According to the results; computer self-efficacy and

facilitating conditions positively influenced perceived ease of use. In addition, perceived usefulness was positively predicted by social influence, goal expectancy, content, and perceived ease of use; goal expectancy, content, and perceived usefulness had a direct influence on perceived playfulness, but perceived ease of use had none. Finally perceived ease of use, perceived usefulness, and perceived playfulness predicted behavioral intention to use WBT in language assessment, whereas content seemed to have no influence on it.

The study has some limitations, though. First, since the questionnaire was only completed by cadets attending a military school, the findings cannot be generalized to other settings and populations. Secondly, the fact that all the participants were male should be taken into account. Third, the results were obtained from the application of WBT in a language course. Application of WBT in another course or subject might reveal different results. Finally, data was only collected through the use of a self-report questionnaire. Supporting the findings with read aloud protocols, observations and/or individual or focus group interviews might deepen our understanding about the mechanisms behind behavioral intention to use WBT.

Finally, this study provides some useful results to practitioners of WBA. First, for students to see that computers are easy to use and there is no room for feelings of worry or insecurity, their self-efficacy about computer use should raise and conditions should be improved by supplying them with enough instruction, experience, space and time to use computers, not only during instructional activities, but also in assessments as well. Second, the content of WBT should be given enough importance, since it plays a crucial role in learners' satisfaction (Wang, 2003) and is considered a crucial variable that influences perceived usefulness (Cigdem & Oncu, 2015).

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