SELF-EFFICACY BELIEFS AND ATTITUDES OF EFL TEACHERS TOWARDS WEB 2.0 TOOLS[*]

Eyyup YAPRAK[1], Gülden TÜM[2]

ABSTRACT

Web 2.0 technologies have increased the importance of foreign languages in recent years. Teachers are expected to encourage students to use these tools, which can be easily included in many of the activities done in the classroom. Therefore, the present study aims to investigate EFL teachers' self-efficacy beliefs and attitudes towards Web 2.0 tools. The mixed method design including the quantitative and qualitative data was utilized. The data was collected from 202 EFL teachers from 183 different public schools in Diyarbakır-Turkey. The quantitative data was gathered through a questionnaire consisting of four parts including demographic information, Web 2.0 Tools Integration Instrument (W2TII), Web 2.0 Tools Integration Self-Efficacy Instrument (WTISEI), and the Decomposed Theory of Planned Behaviour (DTPB) Model to Measure Attitudes. In the qualitative data collection phase, a set of semi-structured interview questions developed by Farah (2011) were used to gather data in considerable detail from the 10 volunteer teachers of English. The data was analysed through SPSS edition 24.0 program and content analysis. The findings unveiled that there was not any significant difference between the self-efficacy beliefs, attitudes of the EFL teachers and their Web 2.0 tools usage according to the demographic variables. However, the results revealed a significant difference between self-efficacy and attitudes of the EFL teachers towards the Web 2.0 tools.

İNGİLİZCE ÖĞRETMENLERİNİN WEB 2.0 ARAÇLARINA YÖNELİK ÖZYETERLİK İNANÇ VE TUTUMLARI

ÖZ

Web 2.0 teknolojilerinin yaygın kullanımı son yıllarda yabancı dillerin önemini artırmıştır. Öğretmenlerin, öğrencileri sınıfta yaptıkları pek çok etkinliğe kolayca dahil edilebilen ve öğrencilerin eğitim hayatını kolaylaştıracak bu araçları kullanmaya teşvik etmeleri beklenmektedir. Bu nedenle, bu çalışmada İngilizce öğretmenlerinin Web 2.0 araçlarını kullanımına yönelik öz-yeterlilik inançları ve tutumları incelenmiştir. Çalışma, nicel ve nitel verileri içeren karma yöntemle gerçekleştirilmiştir. Veriler, Diyarbakır ilinde bulunan 183 farklı devlet okulunda çalışan gönüllü İngilizce öğretmenlerden toplanmıştır. Nicel veriler, Web 2.0 Araçları Entegrasyon Aracı (W2TII) ve Web 2.0 Araçları Entegrasyon Öz-Yeterlik Aracı (WTISEI), Tutumları Ölçmek için Ayrıştırılmış Planlanan Davranış Teorisi (DTPB) Modeli içeren dört bölümden oluşan bir anket aracılığıyla toplanmıştır. Farah (2011) tarafından geliştirilen yarı yapılandırılmış görüşme soruları detaylı veri toplamak için kullanılmıştır. Veriler SPSS 24.0 programı ve içerik analizi ile analiz edilmiştir. Bulgular, İngilizce öğretmenlerinin öz-yeterlik inançları, tutumları ve Web 2.0 araçları kullanımı arasında demografik değişkenlere göre anlamlı bir fark olmadığını ortaya koymuştur. Bunula birlikte, sonuçlar, İngilizce öğretmenlerinin Web 2.0 araçlarına yönelik öz-yeterlikleri ile tutumları arasında anlamlı bir fark olduğunu ortaya koymuştur.

INTRODUCTION

Currently, the constant developments in the fields of science and technology call for the change in the use of technological equipment in educational sciences as in all fields. In today's educational institutions, such technologies used in the form of interactive smart board, tablet, and portable computer have substituted for the traditional teaching materials. The educational institutions of the countries carry out different projects in order to ensure that teachers and students can benefit from these technologies effectively, in addition to creating qualified learning environments appropriate to the needs of the current century. Accordingly, the Ministry of National Education (MoNE) initiated the FATIH (Movement of Enhancing Opportunities and Improving Technology) project in 2010 in Turkey. With this project, it is aimed to increase the quality of education by ensuring the effective use of Information and Communication Technologies (ICT) in the courses by ensuring equal opportunities in education and improving the technological infrastructure of schools (MoNE, 2018). Thus, technology becomes available in the most of the Turkish public schools, teachers have many opportunities to create effective learning environments on the digital platforms and to prepare supplementary teaching materials. Among these, Web 2.0 tools, which offer different kinds of services to the user, are of significant. Web 2.0 applications provide users with various kinds of web-based applications (O'Reilly, 2005) and enable user-generated content by offering various opportunities for individuals to communicate and share the content (Thompson, 2007). Teachers who incorporate Web 2.0 tools might "attract students to school work, meet individual learning needs, develop their critical thinking skills, provide an alternative learning environment, expand learning outside schools, and prepare students for lifelong learning" (Lemke et al., 2009, p. 7). As students are encouraged to be active participants in the classroom and contribute to the content, Web 2.0 tools provide them with the opportunity to create, manipulate and control the content, and socialize by means of it (Horzum, 2007). Moreover, the development of Web 2.0 tools can be considered a technological innovation that supports the change in the education system and can be utilized easily. Students capable of using Web 2.0 tools are not merely individuals who consume information given in classrooms; they become active actors that produce new information, manipulate it, and question the source of the information as well. To cope with those students, teachers are urgently expected to learn how to operate Web 2.0 tools effectively in their instructions. However, at this point, the most serious problem ahead of today's teachers is the Generation Z, whose dates range from the year 1995 (Pacis et al., 2012) to the year after 2000 (Twenge et al., 2010). This generation, intertwined with technology, is also called "Net generation" (Oblinger & Oblinger, 2005; Schulmeister, 2008) and "Digital natives" (Prensky, 2001) since they were born in an age that is completely dominated by technology. Generation Z is technology enthusiast, conform to informality, learn quickly and embrace diversity (Twenge et al., 2010). The use of Web 2.0 tools in teaching and learning processes of the Z generation is no longer a necessity, but an obligation. Additionally, Web pedagogy content knowledge includes self-efficacy beliefs and attitudes of teachers towards the use of the web environment for pedagogical purposes (Horzum, 2011). Bandura (1995) defines self-efficacy as an individual's belief in himself in achieving the set goals or in performing a task. While self-efficacy affects the selection of activities to be performed by an individual, the expectation of success determines how much effort is to be made and how much time is to be spent to deal with the difficulties.

LITERATURE REVIEW
Web 2.0 Self-efficacy Beliefs of Teachers

Web 2.0 self-efficacy beliefs are crucial for teachers and their use of technology in their classroom is a powerful determinant of how effectively they will actually utilize technology (Abbitt, 2011). That is, Web 2.0 applications and services enable users to share content without facing technical barriers, while at the same time making use of the Internet's potential for social interaction and collaboration, rather than using the internet merely as an information provider. In the Web 2.0 realm, all members of a party can contribute to create rich content (Solomon & Schrum, 2007). Web 2.0 refers to the use of the Internet as a mediator to promote interaction among users through tools and technologies such as Blogs, Wikis, or Podcasts (Kostoula-Christina, 2016), Social Networking Sites, Image/Photo Sharing Sites, and Course Management Systems (Davies & Merchant, 2008). Therefore, Web 2.0 tools can be called a platform where content is produced, shared, combined and transferred with the participants. Similarly, Brown (2009) argues that popularity and availability of Web 2.0 tools have enabled today's users, who used to visit only non-interactive web pages, to become individuals who share, interpret, collaborate and interact with information, actively participate and produce contents. In the same vein, Web 2.0 tools in teaching and learning support the users to work with flexible time

intervals and the users' creativity. They are user-friendly programs with very easy-to-use features as many videos and animations relevant within these programs are easily accessible. All these are deduced by social cognitive theory, dating back to the late 1800s, and defining human behaviour as a dynamic and reciprocal relationship of personal factors, behaviours and environment (Bandura, 1977, 1986, 1989). Bandura (1986) bases his social cognitive theory on six principles including mutual decisiveness, capacity of symbolization, capacity of foresight, capacity of indirect learning, capacity of self-regulation and capacity of self-judgement wherein the self-efficacy is tremendously reflected.

Technology Acceptance and Adoption Models

The terms "innovation" and "technology" are often used as synonyms (Rogers, 1983). Many researchers engaged in studies on this subject have proposed different methods on the acceptance and adoption process of technology. The key goal of these models is to determine which internal or external factors are influenced by the intention of use, which is the main factor in the use of technology. These models are useful for understanding and evaluating the diffusion of innovation, and making sense of the acceptance of innovation by individuals as given in Table 1.

Table 1. Summary of Technology Acceptance Theories

Model	Constructs/Determinants of behaviour	Theories/ Models
TAM **(Technology acceptance model)**	perceived usefulness, perceived ease of use	(Davis, 1986)
TAM2 **(Technology acceptance model 2)**	perceived usefulness, subjective norm, image, job relevance, output quality, result demonsrability, voluntariness, experience, perceived ease of use and intention to use	(Venkatesh & Davis, 2000)
TAM3 **(Technology acceptance model 3)**	perceived usefulness, subjective norm, image, job relevance, output quality, result demonsrability, voluntariness, experience, perceived intention to use, computer self-efficacy, perceptions of external control, computer anxiety, computer playfulness, perceived enjoyment, objective usability	(Venkatest&Bala, 2008)
TRA **(Theory of reasoned action)**	attitude towards behavior, subjective norm, behavioral intention and actual behavior	(Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975)
TPB **(Theory of planned behaviour)**	behavioral attitude, subjective norm, perceived behavioral control, intention and behavior	(Ajzen, 1985)
DTPB **(Decomposed theory of planned behaviour)**	perceived usefulness, perceived ease of use, compability, peer influence and superior's influence, self-efficacy, resource facilitating conditions and technology facilitating conditions	(Taylor & Todd, 1995)
UTAUT **(Unified theory of acceptance and use of technology)**	performance expectancy, effort expectancy, social influence and facilitating conditions	(Venkatesh et al., 2003)
IDT **(Innovation Diffusion Theory)**	relative advantage, trialability, observability, compatibility, complexity	(Rogers, 1983, 1995)
SCT **(Social cognitive theory)**	behavior, environmental factor, personal factor	(Bandura, 1986)

Source: Adapted from Ursavaş et al., 2014, pp.891-892.

As afore-mentioned in Table 1, various models and theories have been developed by various researchers since 1975 regarding the adoption and acceptance of information technologies among people. However, there is no clear conclusion among research (Davis, 1989; Taylor & Todd, 1995; Venkatesh, et al., 2003) that any of these models is superior to others in explaining the adoption and behavior of technology use (Ursavaş et al., 2014). This study is based on the Decomposed Theory of Planned Behavior (see Figure 01) to understand ELT teachers' intention to use Web 2.0 (Taylor & Todd, 1995)

Decomposed Theory of Planned Behaviour (DTPB)

Decomposed Theory of Planned Behaviour (DTPB) introduced by Taylor and Todd (1995) shares the similar principles with other theories examining technology acceptance and associates behaviour with intention. Taylor

and Todd (1995) added new sub-variables (compatibility, environmental impact, self-efficacy, resource-facilitating conditions, and technology-facilitating conditions) that determine attitude, subjective norm, and perceived behavioral control. In doing so, they aimed to explain performed behavior of an individual. Similarly, this research employs the DTBP developed by Ajjan and Hartshorne (2008).
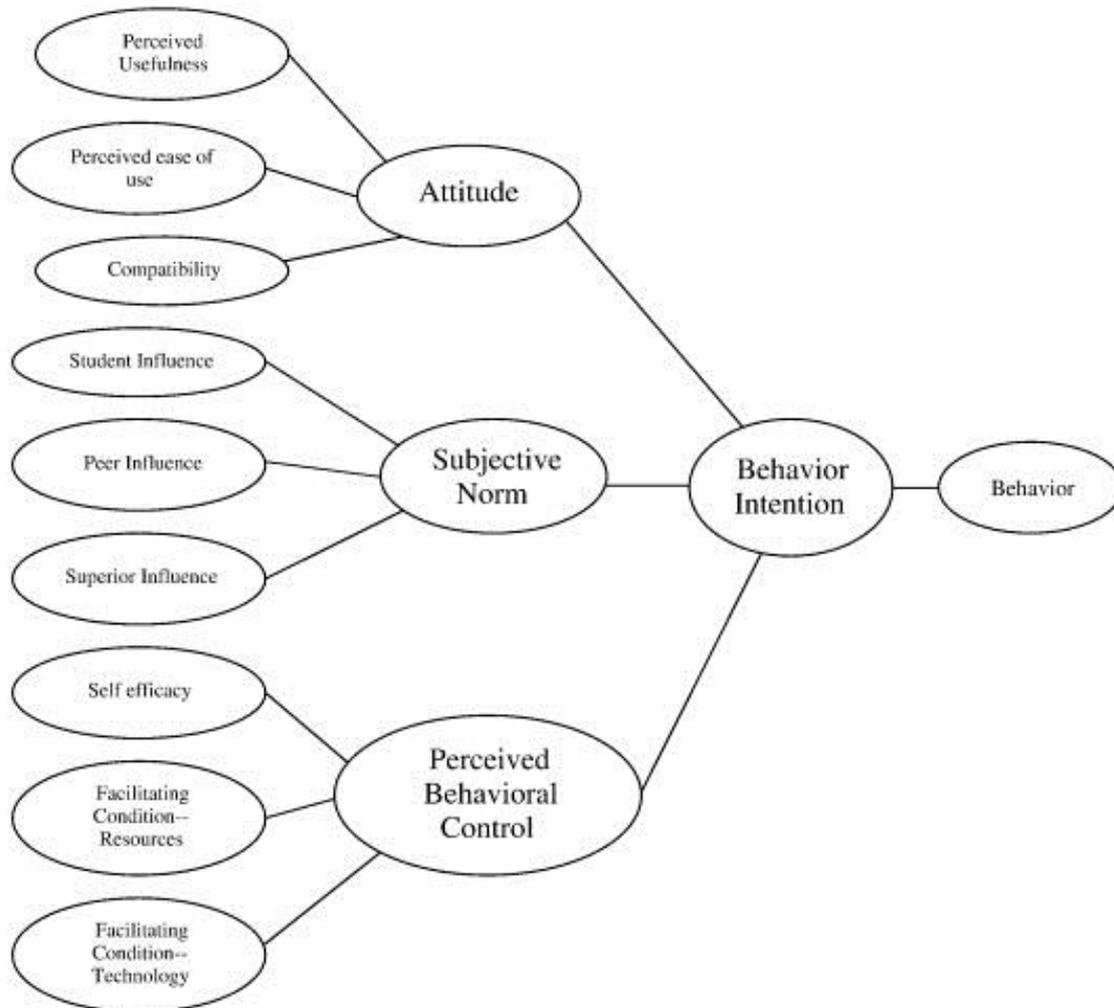

Figure 1. The Decomposed Theory of Planned Behaviour (Source: Ajjan & Hartshorne, 2008, p.73)

As observed above, DTPB includes three main constructs (attitude, subjective norms, and behavioural control). Attitude construct consists of three sub variables related to behaviour: perceived usefulness, perceived ease of use, and compatibility. Subjective norms are divided into three sub-constructs: student, peer, and superior. The opinions of the two groups were separated in DTPB, as their opinions might differ in using a technology. Perceived behavioral control items are divided into three categories: self-confidence, facilitating condition-resources, and facilitating condition-technology.

Web 2.0 Tools Attitudes of Teachers

Ajzen and Fishbein (1980) describe the attitude as a tendency to react consistently, positively or negatively to any object presented as a result of learning. Eagly and Chaiken (1993) interpret the attitude as a psychological tendency to evaluate a certain phenomenon or object to a certain extent, positively or negatively. Teachers' attitudes towards using technology in education context can be described as a factor that affects to what extend teachers benefit and use the technology in learning-teaching process. In order to integrate Web 2.0 tools effectively into the learning environment, teachers who are most effective agents in the process of teaching must

adopt a positive attitude towards technology. In a similar vein, research reports that teacher attitude is one of the most important factors enabling effective ICT usage in teaching and learning environment (Kreijns et al., 2013). Gabriel and Macdonald (1996) state that the negative attitudes prevailing in schools where tech-savvy students are studying may affect the attitudes of teachers. Haydn and Barton (2007) accentuate that many teachers do not use technology in the teaching process to increase learning and feel insufficient about using technology in teaching. This imposes important responsibilities on teachers for the effective use of technology in educational environments. An effective way to solve this issue is to provide teachers with trainings through which they can gain necessary knowledge, skills and positive attitudes towards technology integration. Therefore, the present study aimed to investigate the relationship between the self-efficacy beliefs and attitudes of the EFL teachers towards the Web 2.0 tools in Turkey.

METHODOLOGY

The mixed method design to get better and safer results combining both quantitative and qualitative research techniques in one study (Creswell et al., 2003) is utilized to confirm or cross-validate relationships discovered between variables (Fraenkel et al., 2012). The study, applied during the spring semester of 2018 and 2019 Academic Year in Bağlar, Yenişehir, Kayapınar, and Sur districts of Diyarbakır, Turkey, adopted two data tools: questionnaire and semi-structured interview. The respondents of the questionnaire were (n=202; M-88, F-114) EFL teachers ranging from 24 to 44 years old and coming from 183 public schools. As for semi-structured data collection, 10 EFL teachers from 10 different schools participated as the interviewees who were selected through convenience sampling of nonprobability method because of accessibility and proximity. However, since convenience sampling involves choosing those institutions flexible and easy to access, it might not represent any group separately from itself; it may not be used to generalize the sample to the larger population (Cohen et al., 2007). This weakness might produce a bias, but this can be overcome by using triangulation, in which using different methods for collecting the data within one study will enhance the reliability and validity. The present study was limited to adult EFL teachers working in public schools, Diyarbakır, south-eastern part in Turkey. In addition, the semi-structured interviews were only conducted with 10 EFL teachers who have a Bachelor of Arts (BA) or a Master of Arts (MA) in ELT. A larger number of participants would increase the reliability of the research findings.

Data Collection Tools

The questionnaire included demographic data from participants (gender, age, teaching experience, university degree, in-service training background, years of use of technology in teaching, years of service in teaching, and the level of education in teaching and the district of service). It also included Web 2.0 Tools Integration Self-Efficacy Instrument (WTISEI) developed by Pan & Franklin (2011). The 27-item WTISEI focused on assessing the level of the EFL teachers' self-efficacy in using Web 2.0 tools in their teachings in five items accompanied by a five-point Likert scale: "strongly agree (5)", "agree (4)", "neutral (3)", "disagree (2)", and "strongly disagree (1)". WTISEI obtained a high reliability of Cronbach alpha 0.97 similar result to Pan and Franklin's (2011) study α =0.98. The final part of the questionnaire involved the Decomposed Theory of Planned Behaviour (DTPB) model to measure attitudes (Ajjan & Hartshorne, 2008) of the EFL teachers towards Web 2.0 tools. The 35-item DTPB instrument consisted of items using a five point Likert-scale (strongly disagree to strongly agree) to examine factors that influence EFL teachers' intentions to utilize Web 2.0 technologies in their classrooms. Items focused on areas of actual usage/behaviour, behavioural intention, attitude, ease of use, perceived usefulness, subjective norms, perceived behavioural control, peer influence, superior influence, student influence, compatibility, facilitating conditions (technology and resources), and self-efficacy. The purpose of utilizing the DTBP was to shed light on the relationship of the antecedents and better understand the agents that influence the adoption or use of new technology (Taylor & Todd, 1995). Therefore, in this study, this model was opted for the explanation of the adoption intention and use of Web 2.0 tools by EFL teachers. The means of Cronbach alpha for the overall scales of this instrument resulted α=0.98.

Subsequently, with the purpose of providing in-depth analysis for the quantitative data, semi-structured interviews were conducted with voluntarily selected EFL teachers regarding their self-efficacy beliefs and attitudes towards Web 2.0 tools incorporation in language teaching. The rationale behind it was to "explore in detail the experiences, motives and opinions of others and learn to see the world from the perspectives other than their own" (Rubin & Rubin, 2012, p.3). A non-threatening atmosphere for the interviews and interviewees were provided. In an attempt to verify the validity of the instruments exploited in the study, a pilot study was

conducted with a total number of 10 EFL teachers to address the face validity of the items to determine if the instrument appears to be measuring intended (Lodico et al., 2010). Minor phrasing revisions were incorporated into the final version of the questionnaire utilized in the present study. This study utilized Cronbach's alpha to create a coefficient of internal consistency. In order to decide the internal reliability of the survey instrument, SPSS 24 Edition was used. The value of the Cronbach's alpha of the instruments, including Web 2.0 Tools Integration Instrument (α=0.80), Web 2.0 Tools Integration Self-Efficacy Instrument (α=0.97), and the Decomposed Theory of Planned Behaviour (α=98) model was done, respectively. To conduct a reliable factor analysis, the sample size needs to be big enough. Yet, Field (2009) states that a researcher needs at least 5 to 10 participants per item in the scale. If a factor explains lots of variance in a dataset, variables correlate highly with that factor with four or more loadings greater than 0.6 "is reliable regardless of sample size" (Field, 2009, p. 647).

To determine the construct validity of the input dataset of Web 2.0 tools Integration Self-Efficacy Instrument (WTISEI) with 27-items responded by 202 participants, a factor analysis was examined through Kaiser-Meyer-Olkin (KMO=0.94) and Bartlett's test. The KMO value of this input dataset falls within the last category listed above. Besides, the chi-square value (χ^2 =6344.75) of this dataset obtained with Bartlett's test was found to be significant (df=351, p< .001). Both KMO and Barlett's tests corroborate the suitability of the factor analysis to dataset. After measuring the suitability of the dataset for factor analysis, VARIMAX rotation was also utilized in Principal Component Analysis to establish the sub-scales of the WTISEI.

The DTPB instrument produced results of reliability values ranging from α=0.77 to α=0.95, which is acceptable for exploratory research (Ajjan & Hartshorne, 2008) and Nunnally (1978) who reports that research incorporates instruments into basic research should have reliability of .70 or better. To Ritter (2010), Cronbach's alpha is developed based on the necessity to evaluate items scored in multiple answer categories. A Cronbach test was employed for alpha reliability on each of the constructs in DTPB instrument as given in Table 2.

Table 2. Reliability Analysis of Each Construct the DTPB Model to Measure Attitudes

Construct	α value
Actual usage/behaviour	0.77
Behavioural intention	0.94
Attitude	0.89
Ease of use	0.89
Perceived usefulness	0.95
Subjective norms	0.92
Perceived behavioural control	0.81
Peer influence	0.91
Superior influence	0.93
Student influence	0.92
Compatibility	0.92
Facilitating conditions—technology/resources	0.82
Self-efficacy	0.81
Mean	0.98

As indicated in Table 2., reliability ranged from 0.77 to 0.95, all constructs proved an acceptable reliability (>.70) to measure internal consistency of this instrument.

In Exploratory Factor Analysis, the suitability of the data set collected from 202 participants was investigated. The suitability of 13-item scale items for factor analysis was examined with Kaiser-Meyer-Olkin (KMO) and Bartlett test. The KMO value calculated for sample suitability is .92. The Chi-Square value (χ^2 = 2519.289, SD = 78, p <.001) which was obtained by the Bartlett test was found significant. Principal components technique and varimax rotation were used for factor analysis. Table 5 presents factor loading of items and percentage of explained variance as follows:

Table 3. Factor Loading of Items and Percentage of Explained Variance

Factor	Item No	Statements	Factor Load	Variance Explained %
		When using Web 2.0 Tools in teaching, I feel confident that I can...		
Perceived Usefulness	PU1	I feel that using Web 2.0 will help my students learn more about the subject	.84	59.82
	PU2	I feel that using Web 2.0 will improve students' satisfaction with the course	.86	
	PU3	I feel that using Web 2.0 will improve students' grades	.87	
	PU4	I feel that using Web 2.0 will improve students' evaluation	.86	
	PU5	To help my students better learn the material, I will incorporate Web 2.0 technologies in the classroom	.76	
Subjective norms	SN1	My peers are using Web 2.0 technologies in their classroom	.81	12.22
	SN2	My superior confirms my ability and knowledge to use Web 2.0 technologies in the classroom	.84	
	SN3	My peers think I will benefit from using Web 2.0 technologies in my classroom	.79	
	SN4	My superior thinks it is important I use Web 2.0 technologies in my classroom	.83	
	SN5	My students thinks it is important I use Web 2.0 technologies in my classroom	.72	
Behavioural Intention	INT1	I plan to use Web 2.0 technologies in my classroom	.89	9.94
	INT2	I intend to use Web 2.0 technologies within the next semester	.85	
	INT3	I will add Web 2.0 technologies to my class next semester	.86	

Table 3 reveal that 13 items fall into under three sub-scales which account for the total variance of 82.0%. The dimensions' sub-scales constitute the same factor as Perceived Usefulness (59.82%), Subjective Norms (12.22%), and Behavioural Intention (9.94%). The following table indicates fit values for the proposed DTBP model and the extend of values obtained by the Confirmatory Factor Analysis of the Web 2.0 adoption scale.

Table 4. Fit values for the Proposed Model

Values	Good Fit Values	Acceptable Fit Values	DTPB
X^2/df	$.00 < X^2/df \leq 2$	$2 \leq X^2/df \leq 3$	2.37
RMSEA	$.00 < RMSEA \leq .05$	$.00 \leq RMSEA < .10$	.08
RMR	$.00 < RMR \leq .05$	$.05 \leq RMR \leq .08$	.04
SRMR	$.00 < SRMR \leq .05$	$.00 \leq SRMR \leq .10$	.04
NFI	$.95 \leq NFI \leq 1.00$	$.90 \leq NFI \leq .95$	.97
NNFI	$.97 \leq NNFI \leq 1.00$	$.95 \leq NNFI \leq .97$	.98
CFI	$.95 < CFI < 1.00$	$.95 < CFI < 1.00$	.98
GFI	$.95 < GFI < 1.00$	$.90 < GFI < .95$	.90

The results displayed in Table 4 reveal that the values obtained by the Confirmatory Factor Analysis of the Web 2.0 adoption scale are either good fit or acceptable. The fit index values of the model obtained in CFA tested with 3 latent variables and 13 indicator variables were examined and the Chi-Square value (X2 = 147.30. n = 202, sd = 62, p = 0.00) was found significant. The fit index values were found as RMSEA = .083, RMR = .039, SRMR = .041, NFI = .97, NNFI = .98 CFI = .98, GFI = .90.
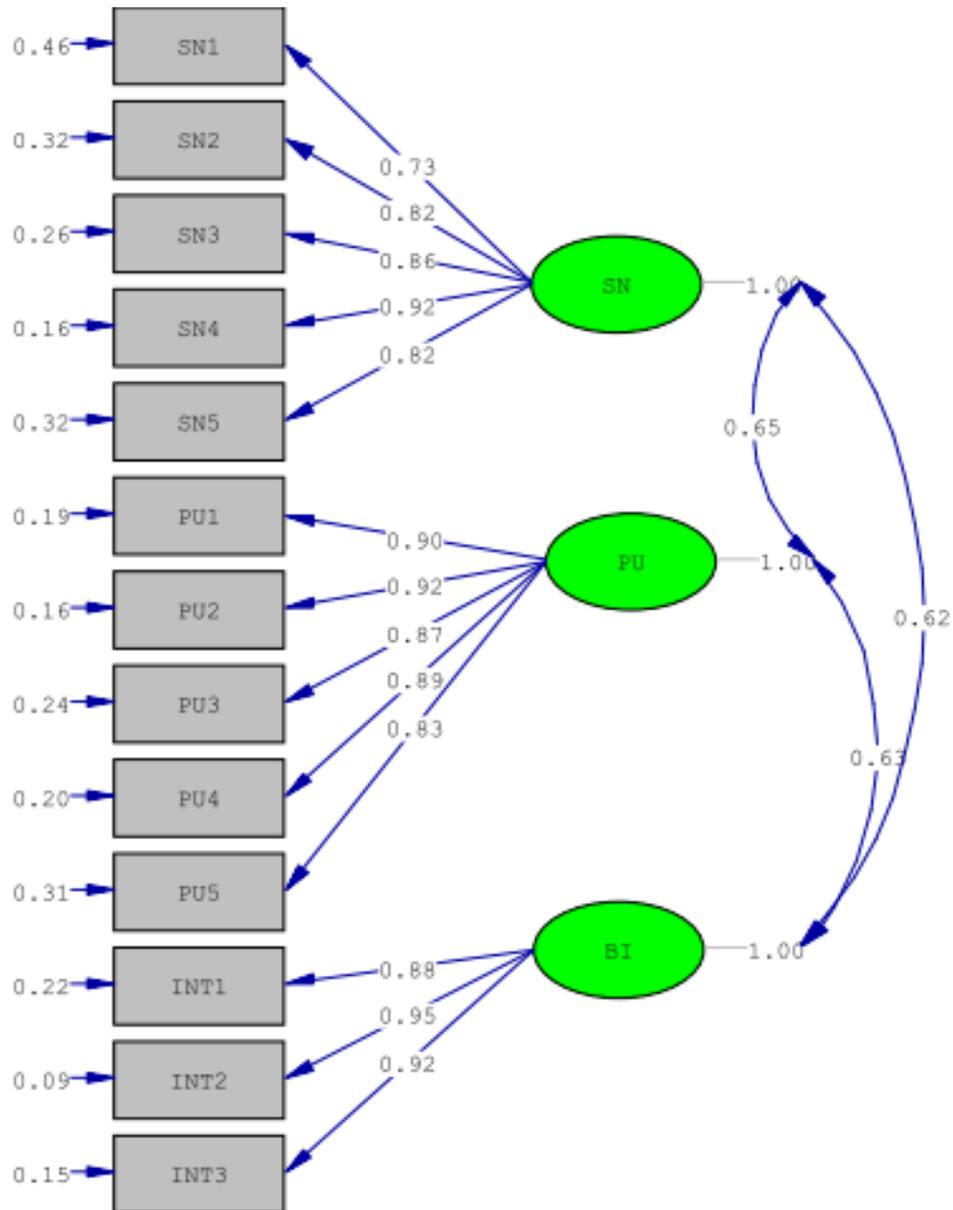
Figure 2. The three-factored latent structure founded with first order CFAs for adoption of Web 2.0 tools using DTBP model.

The three-factored latent construct and factor loads founded with first order CFA for adoption of Web 2.0 tools using DTBP model as the theoretical foundation (scale for the model are presented in Figure 2). Accordingly, INT1 (0.95) item under Behavioural Intention construct has the most impact on adoption of Web 2.0 tools, whereas Subjective norms (0.73) item under Subjective Norms has the least impact. Table 5 presents internal consistency (Cronbach's alpha) of the subscales as follows:

Table 5. Internal Consistency (Cronbach's Alpha) of the Subscales

Subscales	Item No	α
Perceived Usefulness	5	.95
Subjective Norms	5	.92
Behavioural Intention	3	.94
Total Instrument	13	.94

As given in Table 5., Cronbach's alpha values are .94 for the whole subscales, Perceived Usefulness = .95; Subjective Norms = .92; Behavioural Intention = .94. A large and growing body of literature suggest that scales with reliability coefficients of .70 and above is reliable.

Semi-Structured Interview

A pilot study with three volunteer participants and member-checking procedures were employed to seek objective opinions as to how semi-structured interview questions could be made easier to understand, avoid bias or leading questions and/or avoid any potential ambiguity, and employ a valid and reliable qualitative data procedure. After member-checking, minor phrasing revisions were incorporated into the final version of the semi-structured interview utilized in the present study.

In qualitative research, reliability refers to the repeatability of the research results obtained. External reliability is related to whether the results of the research can be obtained in the same way in similar settings, and internal reliability is associated with whether other researchers can achieve the same results using the same data set (LeCompte and Goetz, 1982).

Internal reliability of the qualitative data includes the following steps. First, the researcher has stated his position who merely conducted the interview and analysed the data. Second, the variables regarding the participants in the research are clearly indicated. Third, data collection and data analysis procedure are explained in detail. Fourth, in order to maintain internal reliability, the direct quotations from the semi-structured interview is given without any objective changes. Giving direct quotations can increase the validity and reliability of qualitative data (Neuman, 2013). Finally, while analysing data, the theoretical framework based on the previous studies related to current research and other research findings was compared.

Data Collection Procedure

Data collection process commenced during the spring semester of 2018 and 2019 academic years. Prior to gathering data, permission to use the instruments was obtained from the developers and researchers. Next, the Provincial Directorate for National Education, Diyarbakır-Turkey was contacted to obtain permission to gather data from the volunteer EFL teachers who work in public schools in Bağlar, Sur, Kayapınar, and Yenişehir districts of Diyarbakır-Turkey. Then a pilot study was carried out two weeks ahead of the main study. As for the main data collection, the schools were randomly selected to gather data from the volunteer participants. First, quantitative data was collected via survey questionnaire in the school settings of the 202 participants from 183 schools between March 1 and June 1 in 2019. Then, semi-structured interviews were conducted with 10 EFL teachers who work in different public schools in the academic year of 2018 and 2019. Before the semi-structured interview took place, all the participants were asked if they would like to take part in the study. Ten EFL teachers were volunteer to be visited in their schools and being audio recorded within a certain amount of time ranging from 25 minutes to 42 minutes.

RESEARCH FINDINGS

The present study aimed to investigate the relationship between the self-efficacy beliefs and attitudes of the EFL teachers towards the Web 2.0 tools in Turkey. The findings of quantitative data are displayed in the following tables.

Table 6. Demographic Variables of the Respondents to the Questionnaire

Variables	Properties	N	%
Gender	Male	88	43,6
	Female	114	56,4
	Total	*202*	*100,0*
Age Groups	21-24 ages	13	6,4
	25-29 ages	69	34,2
	30-34 ages	48	23,8
	35-39 ages	34	16,8
	40-44 ages	25	12,4
	45-49 ages	5	2,5
	50-54 ages	4	2,0
	55 and over	4	2,0
	Total	*202*	*100,0*
Teaching Experience	0-5 years	75	37,1
	6-10 years	47	23,3
	11-15 years	40	19,8

	16-20 years	28	13,9
	21 and above	12	5,9
	Total	*202*	*100,0*
Education degree	Graduate	182	90,1
	Postgraduate	20	9,9
	Total	*202*	*100,0*
Level of school	Primary School	60	29,7
	Secondary School	83	41,1
	High School	59	29,2
	Total	*202*	*100,0*
District of the school	Bağlar	62	30,7
	Kayapınar	55	27,2
	Sur	42	20,8
	Yenişehir	43	21,3
	Total	*202*	*100,0*

As accentuated in Table 8, the total number of the participants who responded to the questionnaires was 56.4% identified as female and 43.6% reported as male. The highest percentage (34.2%) of the age group of the participants is observed between 25-29 years old, whereas the lowest percentage (2.5%) is between 50 and over. The teaching experiences of the participants were 0-5 years (37,1%), 6-10 years (23,3%), 11-15 years (19,8%), 16-20 years (13,9%), 21 and above (5,9%). According to the degrees they held, a bachelor degree, 9,1% of them reported to have an MA or a PhD degree. 29,7% of the participants worked in primary schools, 41,1% in secondary schools, and 29,2% in high schools. Finally, as given in Table 8, 30,7% of the respondents reported that they worked in Bağlar district, 27,2% in Kayapınar, 20,8% in Sur and 21,3% in Yenişehir.

Table 7. Mean Scores and Standard Deviations of Decomposed Theory of Planned Behaviour (DTPB)

Constructs	Mean	Std. Deviation
Actual usage/behaviour	3,70	0,82
Behavioural intention	3,51	0,94
Attitude	3,88	0,85
Ease of use	3,63	0,89
Perceived usefulness	3,90	0,85
Subjective norms	3,40	0,85
Perceived behavioural control	3,45	0,96
Peer influence	3,49	0,88
Superior influence	3,54	0,93
Student influence	3,63	0,91
Compatibility	3,72	0,90
Facilitating conditions	3,53	1,01
Self-efficacy	3,50	0,86
Valid N (listwise)		

The results given in Table 7 confirm the attitudes towards adopting Web 2.0 technologies. Items focused on areas ranging from the highest as perceived usefulness (m=3,90), attitude (m=3,88), compatibility (m=3,72) to the lowest as perceived behavioural control (m=3,40) and subjective norms (m=3,40). To these findings, teachers have positive attitudes towards using Web 2.0 technologies in learning process.

The Pearson product moment correlation coefficient was conducted in order to assess the relationship between EFL teachers' self-efficacy level of Web 2.0 tools integration into their instructions and Web 2.0 adoption scores. In correlation tests, correlation forces are interpreted as a small relationship between .10 and .29, moderate between .30 and .49, and high correlation between .50-1.00 (Cohen, 1988). Further, Cohen (1988) interprets that correlation coefficient between .10 and .29 is thought to represent a weak or small association; a correlation coefficient of .30 and .49 is considered a moderate correlation; and a correlation coefficient of .50 and 1.00 or larger is thought to represent a strong or large correlation. Table 8 indicates Pearson correlation between self-efficacy and attitudes of the EFL teachers towards Web 2.0 tools use.

Table 2. Pearson Correlation Between Self-Efficacy and Attitudes of the EFL Teachers Towards Web 2.0 Tools

	Blogs	Wikis	Podcasts	SNSs	IPSs	CMSs	WTISE	PU	SN	BI
Wikis	.71**									
Podcasts	.62**	.69**								
Social Networking Sites (SNSs)	.55**	.50**	.58**							
Image/Photo Sharing Sites (IPSs)	.49**	.56**	.59**	.73**						
Course Management Systems (CMSs)	.60**	.56**	.62**	.56**	.62**					
WTISE	.83**	.84**	.83**	.80**	.80**	.80**				
Perceived usefulness PU)	.34**	.37**	.35**	.43**	.43**	.45**	.48**			
Subjective norms (SN)	.35**	.40**	.39**	.29**	.34**	.46**	.45**	.61**		
Behavioural Intention (BI)	.48**	.38**	.42**	.51**	.46**	.49**	.56**	.59**	.57**	
DTPB	.44**	.45**	.45**	.47**	.47**	.54**	.57**	.88**	.87**	.80**

**. Correlation is significant at the 0.01 level.

The results of the correlational analysis examined in Table 8 indicate that there is a positive and significant relationship between the EFL teachers' Web 2.0 tools self-efficacy and attitudes towards the Web 2.0 tool adoption (r = .57; p <.001). When the relationships with the WTSIE constructs and the DTPB model to measure attitudes towards the Web 2.0 tool adoption are examined, the results reveal that there is a positive and moderate level of relationship (p <.001). When the relationship between DTPB constructs and WTSIE constructs are analysed, the results demonstrate positive, high-strength significant relationship with Behavioural Intention, while the other constructs including Subjective Norms and Perceived Usefulness show a positive and medium-significant relationship. Thus, it can be said that there is a relationship between self-efficacy and attitudes of the EFL teachers towards the Web 2.0 tools.

EFL Teachers' Self-Efficacy Beliefs Towards Web 2.0 Tools

Whether or not participants' self-efficacy beliefs towards Web 2.0 tools caused any significant differences in the scale for determining EFL teachers' use of Web 2.0 was checked through open-ended questions that ask their level of comfort. The opinions on these statements were as in following:

P3. "The syllabus can also be adapted to the Web 2.0 tools by MoNE. I would definitely need more trainings."
P7. "More trainings can be helpful to get confident in using Web 2.0 tools for my lessons and curriculum would be more suitable for using them."
P8. "I will be comfortable 100% if any Web 2.0 tools is recommended by MoNE. I can't be sure about these tools' credibility and that is why I can't recommend my students to use them."

Few of those interviewed suggested technology infrastructure be improved to increase her self-efficacy level as given below:

P9. "If my school is equipped with devices such as smartboard, computer classes and students with a tablet device, then I would be confident."

EFL Teachers' Attitudes Towards Web 2.0 Tools

Open-ended questions were asked during the interview in an attempt to reveal the participants' opinions about their attitudes towards Web 2.0 tools in regards to its role in education as an instructional tool and feelings about using them in their classrooms.

All participants reported that ease of use of use and perceived usefulness were the most significant factors affecting their intentions to use Web 2.0 tools. The participants indicated that social factors exert a positive influence on intentions to use Web 2.0 tools. Some of the statements of such opinions were in the following:

P1. "Web 2.0 tools play crucial role in 21ˢᵗ century education system, especially, when we are all surrounded with technological devices. Web 2.0 tools are amusing and innovations that help me teach English."
P2. "Web 2.0 tools foster students' learning and make teachers' job easier to give innovative lessons. They

provide massive teaching source for education. They are available at any time, at any place."

P4. *"Technology is a must for the 21st century's education system. They are free and effective to facilitate teaching and learning. They provide valuable teaching source for education."*

P5. *"Web 2.0 tools offer many benefits. It enables collaboration and corporation anywhere and anytime. Web 2.0 tools are good idea and they are helpful sources."*

P6. *"They have a lot of important advantages in terms of time and effectiveness. They are more entertaining than books and notebooks for children. They are easy, fun and engaging tools you can use anytime and anywhere."*

P7. *"It has an important role to get students used to the autonomous learning through technology, which is the future of the education system. Using Web 2.0 tools motivate me to use technology in my lessons."*

P8. *"They are quite important because of the changing circumstances and standards. We should notice that they are only "tools", which means we can do our job with or without them. They should not be the "aim" of education. I am not biased, but I don't make my lesson plans by relying on them."*

P9. *"It is really necessary to incorporate Web 2.0 tools into today's English classrooms. They are great tools to teach language skills such as reading, listening, writing and speaking. I think they are easy and dynamic tools to use for teaching English."*

P10. *"Web 2.0 tools are so important in teaching languages. A learner can study autonomously and collaborate with their classroom friends. They can use it anywhere and anytime. Web 2.0 tools provide enriched content."*

As afore-mentioned, the results reported that teachers' self-efficacy is a significant predictor of behavioural intention to use Web 2.0 tools. Likewise, subjective norms and perceived usefulness put forward a positive and medium-significant relationship. Thus, it can be concluded that the ease of use and perceived usefulness can predict the EFL teachers' intentions to use Web 2.0 tools in their future classrooms.

The current study also indicated a positive attitude towards the use of social networking sites only, which can be interpreted that teachers who had positive attitudes towards social networking sites used them more often than the other Web 2.0 tools. Although teachers had positive attitudes towards Web 2.0 tools in general, they did not use them as often as social networking sites. The qualitative findings revealed the participants' opinions about their attitudes towards Web 2.0 tools in regards to its role in education as an instructional tool and feelings about using them in their classrooms. All participants reported that ease of use and perceived usefulness were the most significant factors affecting their intentions to use Web 2.0 tools. That is to say, the EFL teachers stated that Web 2.0 tools provide amusing, easy, helpful, innovative, effective, valuable, collaborative, cooperative, time-saving, engaging, autonomous, motivating, fostering, and facilitating learning.

CONCLUSION

Based on the findings of the present study, EFL teachers mostly used social networking sites and blogs, followed by wikis, podcasts and image/photo sharing sites. The least frequently used tools were course management systems. The popularity of social networks, blogs, and image/photo sharing sites in their daily life may have led these tools to be frequently used by EFL teachers. However, it can be inferred that the majority of teachers rarely incorporated course management systems into their lessons since they may not need these tools in their daily lives. Semi-structured interview results indicated that lack of time and lack of technology infrastructure negatively affect teachers' Web 2.0 tools use during a regular school day. From this aspect, teachers should be given more time and up-to-date infrastructure to promote their use of Web 2.0 tools.

EFL teachers' self-efficacy level did not differ according to their demographic variables such as gender, teaching experience, teachers' experience level, in-service training background, experience in using a device to connect to the Internet. Previous research also corroborates the results of the present study. However, teachers' age affected their self-efficacy levels towards the use of podcasts and social networking sites. Previous research concluded that age does not correlate with self-efficacy because individuals vary greatly in how efficacious they manage their lives. Results of the current study indicated that teachers between 21 and 24 ages had higher self-efficacy than those who are at the age of 40 and above. It may be due to the fact that the initial is amongst the generation Z and they are quite intertwined with technology, thus their self-efficacy level is the highest. Teachers also reported that their self-efficacy levels were influenced by insufficient infrastructure and insufficient in-service teacher training, which prevented an effective adoption of Web 2.0 tools. With this regard, MoNE should provide teachers who are 40 and above with more the in-service teacher trainings in an effort to increase

teachers' self-efficacy towards Web 2.0 tools. The results were broadly in line with Alhassan's (2017) and DoBell's (2013) findings as one of the most significant factors influences teachers' use of Web 2.0 tools in their teaching was their in-service training to use these tools. Similar conclusions reported that the in-service teacher training is one of the most significant agents influencing whether school teachers use and incorporate classroom technology (Niederhauser & Perkmen, 2008; Pan, 2010; Ross & Bruce, 2007; Wang & Newby, 2004).

In a general sense, EFL teachers indicated positive attitudes towards using Web 2.0 technologies in learning process. They reported that using Web 2.0 tools is a good idea, helps their students learn more about the subject, and improves students' satisfaction with the course. These results tie well with previous studies wherein most teachers had positive attitudes towards the use of Web 2.0 tools in general. In contrast to previous results, teachers' gender, age, teaching experience, school levels, and net connection years did not affect the attitudes of them towards Web 2.0 tools. Although teachers had positive attitudes towards Web 2.0 tools, they reported that the Internet connection problem, intensive curriculum, crowded classrooms, inadequate servers, technical problems and negative attitudes of administrators may cause them to adopt negative attitudes towards Web 2.0 tools. These results are in accord with previous studies indicating that though EFL instructors showed a positive attitude towards the use of the Internet and Web 2.0 tools in language teaching, they were not using these tools adequately in their teaching (Özel & Arıkan, 2015). There are similar attitudes expressed by Onbasili (2020) describing that the participants found Web 2.0 tools easy, convenient and enjoyable to use and that they wanted to use those tools in other courses. The findings of this study also support the evidence from previous observations of Ünlüer (2018) reported that the use of Web 2.0 tools in lessons taught by prospective teachers made the lessons more enjoyable, provided fun learning, attracted students' attention, and students participated in lessons more. Therefore, it provided retention in learning, autonomy, and easier learning process.

During the interviews, EFL teachers stated that Web 2.0 tools provide valuable, collaborative, cooperative, effective learning in addition to amusing, easy, helpful, innovative, timesaving, engaging, autonomous, motivating, fostering and facilitating learning.. However, teachers only had positive attitudes towards the use of social networking sites. Popularity of social networking sites can lead teachers to develop positive attitudes towards the incorporation of Web 2.0 tools into their lessons if they were given chances like decreasing their burdens such as overloading schedules and integration of technology more than ever not merely in their school settings but also in the other environments they could utilize these tools free.

EFL teachers' perceived usefulness and subjective norms can predict the EFL teachers' intentions to use Web 2.0 tools in their future classrooms. These results match those observed in earlier studies where pre-service teachers' positive attitudes of perceived usefulness of Web 2.0 tools were the strongest determinant of their intentions (Khati, 2016; Sadaf, Newby & Ertmer, 2016; 2012). The body of literature indicated that the perceived usefulness and ease of use positively affect technology acceptance of teachers (Cakar; 2018; Lee & Coughlin, 2015; Usluel & Mazman, 2010), and their intention to use technology (Jeung, 2014).

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Yazar Katkı Oranı
Birinci yazarın çalışmadaki katkı oranı %60, ikinci yazarın katkı oranı ise %40'tır.