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Learners' beliefs about language-learning abilities in face-to-face & online settings

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Abstract

This mixed-methods study investigates the beliefs of language learners about their ability to attend language classes and learn the language in face-to-face and online settings using Ajzen's perceived behavioral control (PBC) construct. Two treatments were conducted in two contexts: a face-to-face language-learning context ($n = 684$) and an online language-learning context ($n = 289$). The results show that certain variable beliefs can predict students' PBC\self-efficacy in both contexts. The comparative results in both contexts show that students have more positive PBC beliefs toward learning a language in face-to-face settings than in online settings. Based on the results, the use of mixed-methods research is recommended for investigating language learners' beliefs. The use of Ajzen's PBC concept confirms the need to employ different theoretical models in eliciting and examining the ability of language learners to learn the language, as well as the importance of avoiding overused theoretical models to enhance the understanding of the language-learning process.

Keywords: Language learners' beliefs, Perceived behavioral control, Self-efficacy, Online learning, Face-to-face learning, Abilities to learn languages, Locus of control

Introduction

Among the types of beliefs that affect action, the most important and pervasive is people's beliefs about their capabilities to effectively deal with different realities (Bandura, 1986). Language learners' beliefs about their ability to learn a language are vital but difficult to investigate due to the various factors that influence such beliefs (Ajzen, 2005). It is challenging to study the impact of beliefs and attitudes due to the scope, variability, and nuances of human thought and the many factors influencing human behavior. Language learners' beliefs about the degree to which they have control over the learning process and their ability to learn a language influence their motivation to attend language classes and attain higher proficiency levels. The state of mind in which language learners think that they can improve and gain proficiency needs to be predicted to understand their motivations, attitudes, and behaviors.

Language learners' perceptions about the degree to which they have control over the learning process affect learning performance. Students/learners with higher perceived control over the learning process attend classes more regularly, study more and achieve higher levels of proficiency. Of course, the level of perceived control itself constitutes a belief, and this may affect attitudes and/or other beliefs. It is challenging to

quantify or analyze how the perception of control alone affects performance. However, the data on perception indicate that perceived control is an important factor. The prediction of language learners' beliefs about their ability to learn a language would help language teachers and educators when they need to start new interventions, such as creating textbooks, developing teaching methods, and designing course objectives. However, the belief systems of language learners cannot be easily examined, analyzed, and understood due to the complexity of the belief systems and the nature of understanding the belief concept.

This study employs a mixed-methods research (MMR) design to examine language learners' beliefs about their ability to attend language classes and learn English as a foreign language (EFL) in two settings: face-to-face and online. It is important to examine each type of learning environment separately. Analyzing the relative learning of each group helps determine the appropriate course design and teaching methods for language learning. The rationale for comparing the beliefs of language learners in online and face-to-face learning environments is that the differences in beliefs could help researchers understand the discrepancy between students' performance and attitudes in both environments. The results of this comparison will contribute to the variances in published research conducted in both settings. This study adopts Ajzen's concept of perceived behavioral control (PBC) to elicit and analyze students' beliefs about important factors that influence them in face-to-face language-learning (FLL) classes and online language-learning (OLL) classes and compares these settings.

Literature review

Research on the extent and strength of language learners' beliefs about their ability to complete language-learning tasks and attain higher language proficiency levels has drawn the attention of language researchers since the introduction of Bandura's (1977) self-efficacy theory in psychology. Self-efficacy beliefs have a growing body of literature, not only in psychology but also in many other fields, such as education, medicine, and business administration. Bandura (2006) explains the following:

Among the mechanisms of human agency, none is more central or pervasive than belief of personal efficacy. This core belief is the foundation of human agency. Unless people believe they can produce desired effects by their actions, they have little incentive to act, or to persevere in the face of difficulties. Whatever other factors serve as guides and motivators, they are rooted in the core belief that one has the power to effect changes by one's actions. (p. 170).

Numerous language researchers have adopted Bandura's self-efficacy theory in their theoretical frameworks to investigate language-learning processes, such as language-learning strategies (e.g., Magogwe & Oliver, 2007; Stracke & Anam, 2016), anxiety (e.g., Woodrow, 2011), and learner's attribution (e.g., Hsieh & Kang, 2010). Other researchers investigated the relationship between self-efficacy beliefs about language-learning and language-learning skills, such as writing (e.g., Pajares, 2003) and listening skills (e.g., Graham, 2011). In addition, some studies have examined the relationship between self-efficacy and language achievement (e.g., Mills, Pajares, & Herron, 2007), language learners' proficiency (e.g., Choi & Lee, 2016), and study abroad (e.g., Cubillos & Ilvento,

2012). These examples show the extensive use of Bandura's self-efficacy concept in language-learning studies.

Although Bandura's self-efficacy concept has been used and has led to effective results in the area of language-learning motivation, alternative approaches, concepts, theories, and models must be used to investigate the self-efficacy beliefs of language learners. This domination of Bandura's self-efficacy concept in language-learning and teaching studies might raise concerns because it dominates to the extent that alternative concepts have not been sufficiently considered by language researchers, similar to the situation of Gardner's social psychology approach in motivational studies (Crookes & Schmidt, 1991). Scholars (e.g., Crookes & Schmidt, 1991; Dörnyei, 1994) have encouraged the use of new approaches to investigate language-learning processes and the avoidance of the overuse of theories and models, which will increase innovation in language research; scholars have also encouraged the study of language-learning aspects from different theoretical frameworks. The use of successful theoretical frameworks in other fields will increase our understanding of language learners' abilities to successfully learn languages. Researchers have encouraged the use of new approaches to investigate language learning processes and have warned against the overuse of prevailing theories and models. They advocated for the use of alternative frameworks and innovative models for language learning studies. They also recommended that language researchers look to studies in other fields for alternative methods to best advance knowledge in the field of language learning.

Theoretical framework

Perceived behavioral control

This study adopts Ajzen's PBC concept, or "the sense of self-efficacy or ability to perform the behavior of interest" (Ajzen, 2005, p. 118), to elicit and investigate language learners' beliefs. Ajzen (2002) differentiated the PBC concept from other similar constructs, such as self-efficacy and locus of control. Ajzen's (2002, p. 680) PBC concept "comprised of two components: self-efficacy (dealing largely with the ease or difficulty of performing a behavior) and controllability (the extent to which performance is up to the actor)". Drawing an analogy to the expectancy-value model of attitude, PBC is considered to be governed by the total set of accessible control determinants (i.e., beliefs about the presence of factors that may facilitate or impede the performance of the behavior). Specifically, the strength of each control belief (c) is weighted by the perceived power (p) of the control factor, and the products are combined, as shown in the following equation: PBC = $\sum$ (c) + (p) (Ajzen, 2002, 2006).

Ajzen (2006) elaborates that control beliefs are related to the perceived presence of factors that may facilitate or prevent the performance of behavior. These control beliefs – combined with the perceived power of each control factor – govern the dominant perceived behavioral control. Specifically, the perceived power of each control factor to hinder or facilitate the performance of the behavior contributes to PBC in direct proportion to the person's subjective probability that the control factor is present.

This study examines students' PBC, or their sense of self-efficacy, in terms of attending and learning from face-to-face and online EFL lessons. In this study, PBC indicates the total set of accessible control determinants (i.e., beliefs about the presence of

factors that may facilitate or impede the attendance of face-to-face and online EFL lessons).

Purpose of the study and the research questions

As illustrated in the previous sections, it is important to understand language learners' beliefs about their ability to attend language classes and learn. However, it is difficult to examine and analyze learners' beliefs. Therefore, researchers need valid and reliable research tools to elicit and examine language learners' beliefs. This paper uses Ajzen's concept of "perceived behavioral control" to elicit and examine language learners' beliefs to avoid overused theories and examine learners' beliefs using a different concept. By examining and understanding learners' beliefs about their abilities in FLL and OLL contexts, researchers can understand learners' behaviors and expectations. Considering the significant effect of beliefs based on the results of published research, comparing learners' beliefs in both environments will contribute the understanding of the discrepancy between learners' performance and attitudes about language learning in both learning environments. Considering the significant effect of beliefs on student performance [based on the body of published research on the topic], comparing and contrasting learner beliefs in the two types of learning environments will contribute to our understanding of the subject.

1. Based on Ajzen's PBC construct, what are the important factors that influence language learners' beliefs about their ability to attend FLL and OLL classes according to the students' views, and based on these views, what are the five most important factors that can predict the learners' PBC?
2. Based on the results of the qualitative data and quantitative analysis, can Ajzen's PBC concept help language researchers to elicit, understand and predict language learners' beliefs in FLL and OLL classes?
3. Based on Ajzen's PBC concept, what are the differences between language learners' beliefs in FLL and OLL classes?

Methodology
Context
The context of this study is an intensive EFL program in a Saudi university. The program offers four courses, namely, reading, writing, listening, and grammar, for students whose majors are engineering, mathematics, and sciences. The program students are mostly from Saudi Arabia and speak Arabic as their mother tongue. They are between 19 and 25 years old. They are all male, given that public education in Saudi Arabia is sex-segregated at all levels. The program instructors have different biographical information, such as their nationalities, mother tongues, and educational backgrounds. They come from Algeria, Bangladesh, Britain, Canada, Egypt, India, Jordan, Pakistan, Romania, Saudi Arabia, South Africa, Sudan, Syria, the United States, and Yemen.

Design of the Study
This study adopts an MMR design. The rationale of using MMR design is that applied linguists often address complex issues and systems with adaptive, nonlinear, and

dynamic processes and multidimensional outcomes (Hashemi & Babaii, 2013; Larsen-Freeman & Cameron, 2008). However, few studies in the field of applied linguistics have an MMR design, especially studies that investigate language learners' beliefs. Researchers (e.g., Brown, 2014; Dörnyei, 2007; Hashemi, 2012) have acknowledged and advocated for the use of MMR in language-learning and teaching studies. Some researchers (e.g., Altan, 2006; Horwitz, 2007; Navarro & Thornton, 2011) have encouraged the use of MMR to investigate language learners' beliefs because of the complexity of the examination of beliefs. They realized that language learners' beliefs are complex and challenging to understand, especially when only one tool is used to collect and analyze data. Therefore, the researcher adapts an MMR design to examine the topics of this study; specifically, the researcher used the multiphase design.

"The multiphase design is an example of a mixed-methods design that goes beyond the basic designs (convergent, explanatory, exploratory, and embedded)" (Creswell & Clark, 2011, p. 100). This research design employs an iteration of connected quantitative and qualitative investigations that are sequentially aligned, i.e., the Sandwich Model (Sandelowski, 2003). The multiphase design comprises two qualitative/quantitative phases and one quantitative/qualitative phase occurring sequentially. It might contain a qualitative phase followed by a quantitative phase followed by a qualitative phase, i.e., qual → quan → qual (Creswell & Clark, 2011). Using three phases to collect data helped the researcher to use the narratives from the third phase (qualitative phase) to explain the numbers in the second phase (quantitative phase). The qualitative data from the third phase added meanings to numbers in the second phase. Additionally, the numbers in the second phase added precision to the words and narratives in the third phase.

Using three phases enhances the insights and the generalizability of the results, which might be missed when only a single method is used. The use of three sequential phases produced data that was as complete as necessary to inform theory and practice in this research study.

Another advantage of using three phases is that it helps to increase the convergence and validation of results from different methods through the study of the same phenomenon. Additionally, each phase elaborates, enhances, and illustrates the result from the previous phase. The results from the previous phase helped the researcher to understand the results in the next phase. The following paragraphs explain the procedures in the three phases of the multiphase design.

First, two elicitation studies were conducted using interviews and open-ended surveys among two groups to elicit beliefs about learning English in online and face-to-face settings (i.e., first phase). Ajzen's (2006) theory requires elicitation work to identify accessible control beliefs that influence students' abilities. FLL beliefs were elicited from 61 students using an open-ended survey and from 4 students through interviews. OLL beliefs were elicited from 64 students using open-ended surveys and from 4 students through interviews. After analyzing the qualitative data from the open-ended surveys and interviews, the questionnaires for the OLL group and the FLL group were designed and piloted using general guidelines to administer the surveys (e.g., Dörnyei, 2003). Based on the results of the first qualitative phase, five factors were included in the questionnaire to perform the quantitative phase. To validate the questionnaires, the FLL and OLL questionnaires were piloted on 99 and 70 language-learning students,

respectively. In addition, both of the questionnaires were sent to nine instructors in the program for them to review and provide feedback and suggestions. Both of the questionnaires were revised based on the reviewers' comments and the results of the piloted studies.

Eventually, the final version of the OLL and FLL group questionnaires was designed and employed. During this process, some published samples were used as a default for designing the final questionnaire, such as that of Ajzen (2006, 2013) and Fishbein and Ajzen (2010). Additionally, the guidelines and recommendations provided by Ajzen (2006) and Francis et al. (2004) on how to construct a theory of planned behavior questionnaire were adopted. After the questionnaires were employed, the FLL and OLL groups underwent two weeks of reading lessons in face-to-face and online settings, respectively. The researcher started conducting the study after obtaining permission from the administration of the university and the Institutional Review Board (IRB). Informed consent was obtained from all individual participants included in the study.

Afterward, the interviews were conducted with some participants from both groups to understand the quantitative data from the questionnaire in greater depth. The researcher used the questionnaire items from the second phase to guide the interview (i.e., the third phase). Appendices A and B present more details about the themes that the researcher asked about during the interviews. The researcher paraphrased these questions to obtain more details about the participants' perspectives regarding the five themes that were used in the questionnaires. The researcher conducted the interviews in Arabic because the participants can elaborate more in their mother tongue and express their views in more detail. The participants in the interviews were randomly selected from different sections to represent the voices of different learners in different sections of the same course. Choosing participants from different sections helped the researcher obtain a sample that represented the entire population in both environments. The researcher went to the classes and asked two volunteers who completed the questionnaires to conduct the interviews. The researchers tried to cover most of the sections in the course. The researcher started the interviews by asking the interviewees about their perspectives regarding the questionnaire items. The researcher tried to keep the conversations to the topic of the focus, using the questionnaire items as guidelines. Although the researcher had experiences teaching in this context, he presented himself to the participants as an outside researcher who wanted to understand the learners' perspectives. The researcher believed that by presenting himself as an outsider, he would gain the participants' trust and be able to encourage them to share their views freely. Although the researcher is an experienced teacher of the subject matter, he presented himself as a disinterested outside researcher to gain the participants' trust. The purpose of this was to encourage each student to express his views honestly and without reservation. These procedures assured the integrity of the research data.

Participants

The participants in the FLL group were students in a 011 intensive English program. The program is the first level offered in the first semester of the first college year. The program is designed for students of the Colleges of Engineering, Computer Sciences, Sciences, Financial and Administrative Sciences, Humanities, and Education. The

program has four courses, namely, listening, grammar, writing, and reading, that are taught by different instructors. The reading course was selected for this study to avoid the effect of any differences in language skills on students' beliefs and performance. The reading course met for 3 h a week as required by the syllabus. The instructors in the course used the same textbook. Two chapters from the textbook were taught for two weeks in face-to-face settings.

The participants in the OLL group were the students of the second level of the program (i.e., the 012 English intensive program). This program is offered in the second semester of the first year for students who have finished level one (i.e., the 011 intensive English program). Similar to the FLL group, the reading course was selected to match the topic area used for the ENG 011 (face-to-face) group. The instructors in this course used the same textbook, *Level II*, written by the same authors. The textbook is the second level in a four-level reading series. Two chapters were selected to be taught fully online for two weeks using the Learning Management System Blackboard.

Materials and instruments

Questionnaire

The final questionnaire consisted of three sections for both groups. The questionnaire is the second phase in the design of the study and contains quantitative data. The first section contained biographical information. The second section contained closed-ended questions about students' beliefs. This study reported the results of 28 items in both questionnaires: 4 items to measure the direct measures of the PBC concept and 10 items to measure the indirect measures of the PBC concept in each survey. The five indirect measures were presented in two items. In other words, two questions were asked for each theme. For example, the control belief (living close to the campus) was presented in one item, and its perceived power was presented in another item. Based on the analysis of the elicitation studies, five influential themes were identified for each group because they were repeated and stressed by participants in the qualitative data. These five themes were presented in two items (control belief and perceived power) in the final questionnaire.

The five themes of the FLL group are as follows: (a) living close to the university campus; (b) availability of campus facilities (such as cafeterias, coffee shops, and places to study) and classroom amenities (such as air conditioning, lights, chairs, and tables); (c) transportation difficulties, such as traffic jams and car accidents; (d) having family and social responsibilities; and (e) being ill or tired or not having sufficient sleep. As illustrated above, these five themes were elicited from the first phase of the research.

The five themes of the OLL group are as follows: (a) living close to the university campus; (b) the availability of Internet access; (c) having adequate knowledge of the use of a computer and surfing the Internet; (d) having adequate financial resources to purchase a computer and an Internet subscription; and (e) having adequate training on how to learn online.

The last section of the survey contained an open-ended question to give the students the opportunity to add their thoughts and ideas about learning to read in English in both settings. The open-ended question contributed to the third phase (i.e., interviews). In addition, it was analyzed qualitatively. As recommended by Francis et al. (2004),

items were presented in a nonsystematic order in the survey to ensure reliability. The Arabic and English versions of the research instruments were used to allow participants to talk about their beliefs without language constraints because issues with regard to language fluency might limit participants from expressing their feelings, beliefs, and opinions. Appendix A contains the FLL group questionnaire, and Appendix B contains the OLL group questionnaire (both attached in a separate file for reviewing purposes).

Pre-analysis procedures

After the surveys were screened, 81 and 45 participants from the FLL and OLL groups, respectively, were excluded because they did not provide their biographical information, did not complete all of the questionnaire items, or did not seem to be engaged and chose the same answer for all questionnaire items. Next, the internal consistency of four items for the PBC direct measure was checked using Cronbach's alpha. In both the FLL and OLL survey direct measures, SPSS suggested that the third item that measures the PBC be deleted to improve Cronbach's alpha. Thus, this item was deleted from further analyses in both surveys. This item was poorly constructed and might have confused the participants in both the OLL and FLL surveys.

After timing each PBC beliefs item with its PBC perceived power item in the survey, the results were checked for univariate outliers using a z-score of 3.29 ($z > \pm 3.29$) as the criterion for identifying univariate outliers, and they were converted to the highest or lowest nonoutlier scores. Next, the data were checked for multivariate outliers in the PBC indirect measures using Cook's distance and the Mahalanobis distance. The results show six multivariate outliers in the FLL group and seven multivariate outliers in the OLL group. These multivariate outliers were excluded from further analysis. The sample sizes of the FLL and OLL groups became 684 and 289, respectively. Next, the data were checked for the univariate normality in the PBC indirect measures using the criteria of skewness (greater than ± 2.00) and kurtosis (greater than ± 7.00). The results of the items do not exceed the criteria of skewness and kurtosis (greater than ± 2.00 and greater than ± 7.00, respectively).

FLL group quantitative results

FLL group descriptive results

The participants in the FLL group came from different backgrounds. They study on two campuses and have different university majors. In the last two years of high school, Saudi students must choose between a scientific stream and a literary stream. Students who join the scientific stream can join all of the university colleges, whereas students who join the literary stream can be literary, arts, and humanity majors but cannot be scientific and medical majors. Of the participants, 639 graduated from the scientific stream, and 45 graduated from the literary stream. In addition, 604 of the participants graduated from public/government high schools, and 80 graduated from private or other types of high schools. The participants are joining six colleges: College of Sciences ($n = 193$), College of Financial and Administrative Sciences ($n = 162$), College of Engineering ($n = 144$), College of Computer Science ($n = 72$), College of Humanities ($n = 57$), and College of Education ($n = 56$).

FLL group inferential results

First, the researcher analyzed the potential correlation between the scores of the five PBC indirect measures (PBC1 = living close to the university campus will help me attend face-to-face English reading lessons; PBC2 = the availability of the campus facilities, such as the cafeteria, coffee shops, and places to study, as well as classroom amenities, such as air conditioning, lights, chairs, and tables, will help me attend face-to-face English reading lessons; PBC3 = transportation difficulties, such as traffic jams and car accidents, may prevent me from attending face-to-face English reading lessons; PBC4 = having family and social responsibilities may prevent me from attending face-to-face English reading lessons; PBC5 = being ill or tired or not having enough sleep will make it difficult for me to attend face-to-face English reading lessons) and the score of the mean of the PBC direct measures using the Pearson correlation. The five indirect measures were correlated with the direct measure's mean except for the PBC5.

The researcher used the scores of the five PBC indirect measures in face-to-face EFL reading lessons to predict the PBC direct measure's mean in face-to-face EFL reading lessons ($n = 684$). Figure 1 is an AMOS diagram that illustrates the correlations among PBC indirect measures and shows the standardized effects of the five PBC indirect measures on the PBC direct measure's mean.

The five indirect variables, considered together, significantly predicted the PBC direct measure's mean ($p < .00$), with 15% overlap among the five predictors and the outcome of PBC. When predicting the PBC direct measure mean, approximately .76 PBC-rating points were erroneously obtained based on a scale of 1 to 4.67. PBC1, PBC2, and PBC4 remained significant predictors, with PBC1, PBC2, and PBC4 having a standardized effect of .28 ($p = .00$), .16 ($p = .00$), and $- .13$ ($p = .00$), respectively. PBC1, PBC2, and PBC4 were the only significant predictors of the PBC direct measure's mean. PBC3 and PBC5 were not significant predictors of the PBC direct measure's mean, with PBC3 and PBC5 having a standardized effect of $-.08$ ($p = .08$) and 0.07 ($p = .10$), respectively.

A one-point increase in PBC1, PBC2, PBC3, PBC4, and PBC5 was associated with an increase in the PBC direct measure mean of .28, .16, $-.08$, $-.13$, and .07 points, respectively. Table 1 shows the descriptive statistics and correlations among variables.
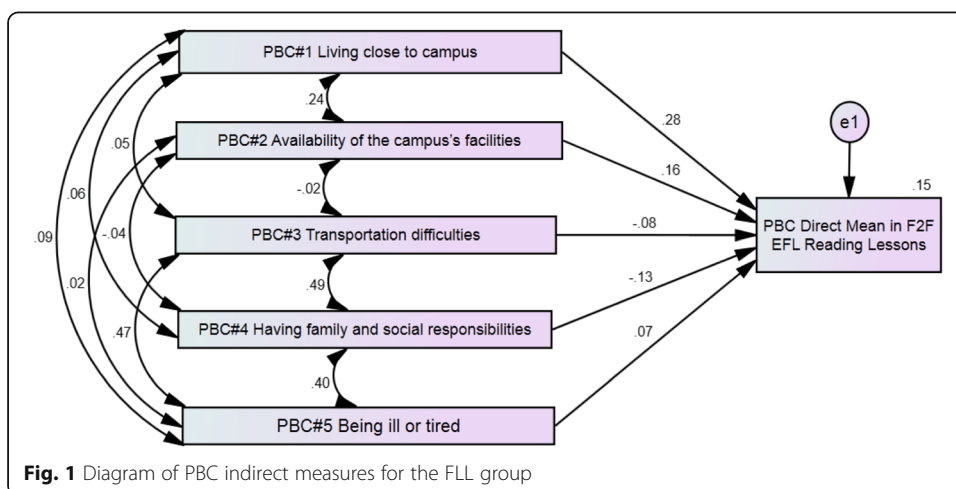

Fig. 1 Diagram of PBC indirect measures for the FLL group

Table 1 Descriptive Statistics and Correlations of PBC Measures for the FLL Group ($n = 684$)

Variables	Pearson's r					
	M (SD)	PBC2	PBC3	PBC4	PBC5	PBC Direct Mean
PBC1 Distance to Campus	8.33 (6.34)	.24	.05	.06	.09	.31
PBC2 Campus Facilities	6.32 (5.27)		−.02	−.04	.02	.23
PBC3 Transportation	6.97 (6.17)			.49	.47	−.10
PBC4 Responsibilities	10.05 (8.64)				.40	−.13
PBC5 Being Ill and Tired	6.13 (5.39)					.01
Direct PBC Mean	2.07 (.82)					

OLL group quantitative results

OLL group descriptive results

The participants in the OLL group ($n = 289$) came from different backgrounds. The majority of the participants majored in science in their high school ($n = 253$) and studied in government high schools ($n = 252$). They come from four colleges: College of Financial and Administrative Sciences ($n = 167$), College of Computer Sciences ($n = 54$), College of Engineering ($n = 46$), and College of Humanities ($n = 22$).

OLL group inferential results

First, the researcher analyzed the potential correlation among the scores of the five PBC indirect measures (PBC1 = living close to university campus will not help me attend online English reading lessons; PBC2 = the availability of Internet access will help me attend online English reading lessons; PBC3 = having adequate knowledge about the use of computers and surfing the Internet will help me attend online English reading lessons; PBC4 = having sufficient financial resources to purchase a computer and an Internet subscription will help me attend online English reading lessons; PBC5 = having adequate training in how to learn online will help me attend online English reading lessons) and the PBC direct measures mean for the OLL group using the Pearson correlation. The five indirect measures correlated with the direct measure's mean, except PBC1.
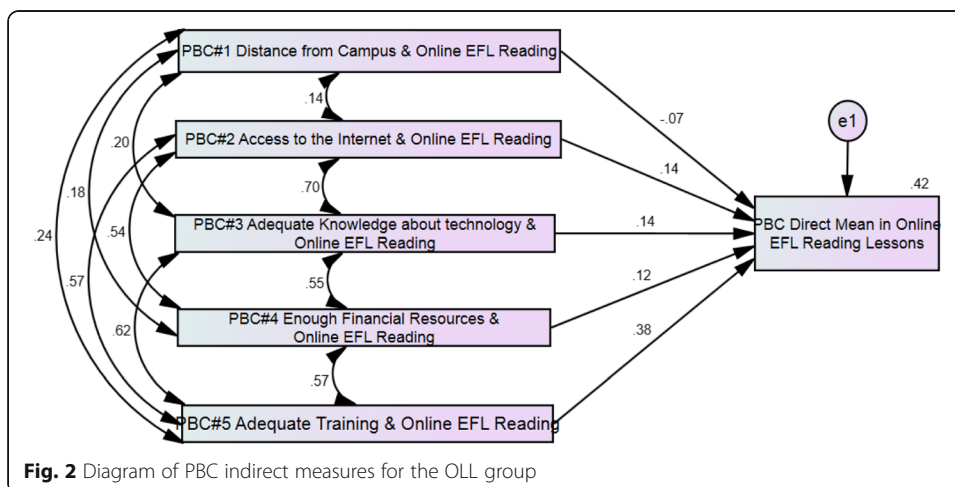

Fig. 2 Diagram of PBC indirect measures for the OLL group

The researcher used the score of the five PBC indirect measures to predict the mean of PBC direct measures ($n = 289$). Figure 2 is an AMOS diagram that illustrates the correlations among PBC indirect measures and shows the standardized effect of the five PBC indirect measures on the PBC direct measure's mean for the OLL group.

Taken together, the five indirect variables significantly predicted the mean of the PBC direct measures ($p < .00$), with 42% overlap among the five predictors and the outcome of PBC. When predicting PBC, approximately 0.81 PBC-rating points were erroneously obtained based on a scale of 1 to 5.67. Only PBC2, PBC3, and PBC5 remained significant predictors, with PBC2, PBC3, and PBC5 having a standardized direct effect of .14 ($p = .04$), .14 ($p = .04$), and .38 ($p = .00$), respectively. PBC2, PBC3, and PBC5 were significant predictors of the PBC direct measure's mean. PBC1 and PBC4 were not significant predictors of the PBC direct measure's mean. PBC1 and PBC4 had standardized direct effects of $-.07$ ($p = .16$) and .12 ($p = .05$), respectively.

A one-point increase in PBC1, PBC2, PBC3, PBC4, and PBC5 was associated with a decrease in the PBC direct measure mean of $-.07$, .14, .14, .12, and .38 points, respectively. Table 2 shows the descriptive statistics and correlation among variables.

Comparing the results of the FLL group and the OLL group

The FLL group ($n = 684$) was associated with a direct PBC score mean of $m = 2.1$ ($SD = .82$). By comparison, the OLL group ($n = 289$) was associated with a numerically higher PBC mean $m = 2.32$ ($SD = 1.1$). To test the hypothesis that the FLL group and the OLL group are associated with a statistically significantly different PBC mean, an independent sample t-test was performed. The assumption of the homogeneity of variances was not assumed via Levene's F test ($F (440.66) = 20.52$, $p = .000$). A Welch correction was used (analysis result: $F (440.66) = 12.38$, $p = 0.001$). Thus, the mean of the FLL group was determined to be statistically and significantly smaller than that of the OLL group. Cohen's d was estimated at .23, which is a small-size effect based on Cohen's (1992) guidelines.

Qualitative results

The following sections present the results of the third phase of the design. It presents the results of the qualitative analysis that explains the second phase results (i.e., quantitative results from the questionnaire items) and the results of the open-ended questions from the questionnaire and the interviews.

Table 2 Descriptive Statistics and Correlations of PBC Measures for the OLL Group ($n = 289$)

Variables	Pearson's r					
	M (SD)	PBC2	PBC3	PBC4	PBC5	PBC Direct Mean
PBC1 Distance to Campus	13.48 (9.51)	.14	.21	.18	.24	.09
PBC2 Access to Internet	5.79 (5.69)		.70	.54	.57	.51
PBC3 Technical Knowledge	5.26 (5.21)			.55	.62	.53
PBC4 Financial Resources	6.49 (6.17)				.57	.47
PBC5 Technical Training	6.19 (5.67)					.60
Direct PBC Mean	2.32 (1.06)					

FLL group qualitative results

To thoroughly understand students' PBC beliefs about their ability to attend FLL classes, the researcher conducted 11 interviews (2 students in each interview) with participants from different majors, sections, and home locations. A total of 22 students participated in the interviews, and 134 students provided comments, suggestions, ideas, and thoughts in the last question in the FLL group survey. After transcribing the interviews and surveys, the researcher started coding students' beliefs. Special attention was paid to PBC beliefs that motivate and demotivate students to attend FLL lessons. This section presents the PBC beliefs that influence students' abilities to attend and learn in FLL classes. PBC beliefs within FLL classes encompass several identifiable variables affecting student learning capabilities. These PBC beliefs are classified into two broad categories with several variables: PBC beliefs inside FLL classes and PBC beliefs outside FLL classes.

PBC beliefs inside FLL classes

The first category includes beliefs that are related to factors inside FLL classes. The first variable belief that enables or disables students to attend and learn in FLL classes is the amount of discussion and interaction between students and instructors. FLL participants believe that more opportunities for interaction and discussion with instructors are provided inside FLL classes than in OLL classes. The learners believe that opportunities to ask questions about difficult topics are offered, whereas instructors explain more lessons in FLL classes than in OLL classes. The opportunity to be in FLL classes enables them to ask questions when they cannot easily understand difficult language topics in face-to-face settings. The participants believe that FLL classes generally include more detailed instructor explanations of difficult topics and provide more opportunities to ask questions than do OLL classes. The second variable belief is the belief about the level of clarity and direction of instructors' answers to the questions of students. FLL participants believe that they can obtain more direct, brief, and concise answers to their questions when attending FLL classes. They also immediately obtained these answers inside FLL classes. They believe that they will not be able to obtain immediate answers in asynchronous OLL classes.

The third variable belief is the belief about the level of effectiveness of the teaching methods inside FLL classes. FLL participants believe that teaching methods in FLL classes help them learn and that teachers can use different teaching methods in FLL classes. The fourth variable belief is the belief about the number of technical problems inside FLL classes compared with those in OLL classes. FLL students believe that few technical problems occur during FLL classes. Others believe that technical problems might also occur inside FLL classes. The fifth variable belief is the belief about the degree of procrastination in the submission of assignments and quizzes. FLL participants believe that attending FLL classes enables them to submit their assignments on time due to the fixed schedule of FLL classes. They believe that the flexibility in OLL classes might increase the incidence of procrastination in submitting assignments and quizzes.

The sixth variable belief is the belief about the time of day when FLL classes are held. FLL participants strongly prefer to attend FLL classes in the morning. FLL participants have difficulties attending language classes during the late afternoon. In addition, FLL

participants believe that the times of their FLL classes match their daily life activities and are not in conflict with other university classes. Some FLL participants believe that coming to campus to attend a one-hour class only is not worth it. FLL participants believe that they have a negative attitude toward a long break (more than two hours) between their FLL classes. The seventh variable belief that facilitates or prevents students' attendance to FLL classes is the belief about the length of class time. FLL participants believe that they have difficulties retaining the language lesson during a long (i.e., more than one hour) FLL class.

PBC beliefs outside FLL classes

The second category includes beliefs that are related to factors outside FLL classes. PBC beliefs outside FLL classes also encompass several identifiable variables affecting student learning capabilities. The first variable belief that facilitates or prevents students' attendance to FLL classes is the belief about the length of transportation time and traffic problems when attending FLL classes. The FLL participants believe that problems related to transportation and traffic difficulties prevent them from attending classes at the university. The FLL students believe that the difficulty in attending FLL classes increases with distance. These students also believe that transportation problems are exacerbated with increased commuting distance. The second variable belief is the belief about the level of appropriateness of university facilities, such as parking spots. The FLL participants believe that the number of proximal university parking spots for students attending FLL classes is insufficient. Finding convenient parking spots makes it difficult to attend or sometimes causes them to be late for FLL classes.

The third variable belief is the belief about the distance between class locations for FLL classes. FLL participants believe that attending classes in different halls and buildings does not cause problems. Other FLL participants believe that having their classes in different halls and buildings is difficult, especially when break times between classes are insufficient. The fourth variable belief is the belief about weather status when attending FLL classes. FLL participants believe that pleasant weather encourages them to attend FLL classes, whereas bad weather discourages them from attending these classes.

The next variable belief is the belief about the degree of support of instructors, friends, family, and classmates for FLL classes. FLL participants believe that their family, instructors, classmates, and friends support their attendance to FLL classes more than their attendance to OLL classes. For example, FLL participants believe that instructors attempt to teach diligently and have sincere intentions to teach students in face-to-face settings. FLL participants also believe that they can ask their classmates for help when attending FLL classes. Some of the participants think that their family members discourage them from attending OLL classes because they are unfamiliar with this concept.

OLL group qualitative results

To understand the students' PBC beliefs about attending and learning in an OLL environment, eight interviews with 16 students (2 students in each interview) from different backgrounds were conducted. In addition, 58 students wrote their comments in the

survey. After transcribing the interviews and surveys, the researcher started to code the students' beliefs. Special attention was paid to PBC beliefs that motivate and demotivate students to attend OLL lessons. This section presents the PBC beliefs that influence student attendance in OLL classes. These PBC beliefs are classified into three categories that have several variables: inside OLL class factors; outside OLL class factors; and personal factors.

PBC beliefs inside OLL environment

The first category includes beliefs associated with students' PBC inside an OLL environment. The first variable belief pertains to the actual interactions and discussions between face-to-face and online conditions that may encourage and discourage students to attend and learn in OLL classes. Participants believe that discussing and interacting online may not enable them to discuss and interact in face-to-face settings because they believe that the two learning environments differ. The second variable belief is the belief about the degree of formality in an OLL class atmosphere. OLL participants believe that strict and formal regulations do not exist when attending OLL classes. Others believe that the learning process is less formal and less friendly inside OLL classes.

The third variable belief is the belief about the degree of effective communication inside OLL classes. Participants believe that they can efficiently communicate online while attending OLL classes. Others believe that communicating online for different reasons, such as the lack of ability to freely use body language and facial expressions, is difficult compared with communication in face-to-face settings. The fourth variable belief is the level of ability to practice language online. Participants believe that they can easily practice language online due to a large number of websites and applications that help learners practice a target language. Others believe that some topics are difficult to practice online, such as speaking English to greet customers and showing them products.

The next variable is the belief about the level of development of computer and technological skills when attending OLL classes. Participants believe that they will be able to develop their computer skills and knowledge, as well as their language, when attending OLL classes. The next variable is the belief about the percentage of technical problems at the university system that runs the OLL classes. Participants believe that some technical problems may exist in the university system. This factor may prevent them from attending OLL classes.

The next variable is the belief about the level of pretraining in online learning before attending OLL classes. Participants believe that having sufficient training about online learning, in general, enables them to attend OLL class more effectively. The next variable belief is the belief about the regularity in logging on to a university account. Participants believe that they may not be able to regularly log on to their university online account and may miss some activities and assignments while taking OLL classes. The participants doubt the reliability of system access and fear that they might miss important notices and assignments when taking OLL courses.

PBC beliefs outside OLL environments

The second category concerning the beliefs outside OLL classes is affected by several variables. First is the belief that noneducational online material may distract OLL

students from their academic endeavors. Participants believe that ready access to websites and applications (i.e., Facebook, YouTube) may present distractions that prevent them from engaging in the learning process. The second variable is belief regarding the potential benefits from open online resources when attending OLL classes. Some participants believe that they can use online, open source materials and websites (i.e., YouTube) as tools to learn the target language and improve their skill levels. Others believe that general online resources will be of little value. They believe that finding resources that match their syllabi and level of proficiency may be too difficult. Furthermore, they believe that finding online material that comports with the course objectives and desired learning outcomes may be impractical.

Another variable is the belief about the degree to which OLL classes help mitigate or avoid transportation problems. Some participants, especially those living far from the university, believe that OLL classes help them avoid traffic problems and transportation difficulties. Others believe that OLL classes are of limited utility with respect to transportation issues. Some participants report that they still must regularly come to campus for other classes, labs, etc. Therefore, there is little practical advantage to online class attendance. The fourth variable is the belief about the level of support classmates and family members have for OLL classes. Some participants believe that most of their family members and classmates discourage taking OLL classes because they are unfamiliar with the process. Family members might be inclined to hire private instructors as an alternative to OLL.

The fifth variable is the belief about the technical problems when accessing OLL classes from home. Many participants believe that with the current technology, technical problems that prevent them from accessing OLL classes will be minor in nature and few in number. The final variable is the belief about potential financial difficulties in taking OLL classes. Although the majority believe that attending OLL classes saves money (i.e., transportation costs), others disagree. Participants argue that the cost of hardware, software and service subscriptions actually increases education costs.

Discussion and recommendations

The participants in this study are in some ways homogenous but are diverse in other ways. They all share the same culture and native language and have similar high school educations. However, they have diverse academic backgrounds, schools, majors and career tracks. The results of the descriptive data of both groups reveal the diversity of the participants in terms of their academic backgrounds, such as colleges and majors. The researchers found that the students' academic majors correlate with their beliefs about learning languages. Although the participants came from different academic backgrounds, the majority have low PBC toward learning EFL online. The qualitative data demonstrate that personal characteristics influence the beliefs of language learners. For example, the attendance of students living in remote areas in OLL classes will be higher than that in FLL classes, especially in asynchronous OLL classes. Another variable is the level of language proficiency. The participants believe that their high level of language proficiency will enable them to succeed in attending OLL classes. They believe that those with low proficiency levels should be included in face-to-face training, whereas those with high language-learning levels can learn online.

The results on the PBC direct mean of the FLL group demonstrate that the participants have positive beliefs about their ability to attend and learn foreign languages in face-to-face settings. The *t*-test result indicates that the participants in this context prefer to learn English in face-to-face settings. The participants had negative PBC beliefs about learning English online. This result might be explained by the qualitative data that show that the participants are not strongly familiar with learning languages fully online. Although the students have been taking EFL courses since their elementary years, modern technology was not strongly incorporated during those years. This result indicates that blended learning must be adopted before shifting to learning fully online. Blended learning will help learners familiarize themselves with online learning and increase their positive PBC beliefs about learning languages online. Once learners develop highly positive PBC beliefs in blended language learning, language educators can offer fully OLL classes. Blended learning would allow for an easier transition to FLL courses and increase their positive PBC beliefs about learning languages online. As the students develop more positive PBC beliefs in blended language learning, language educators can offer OLL classes fully with lower student resistance.

Although many researchers encourage the use of online learning, the results of the current study show that learners have negative PBC beliefs about learning languages online. This negative PBC belief will influence their self-efficacy and, consequently, affect their learning outcomes. Students need to be highly motivated to independently overcome challenges in online learning because the interaction between teachers and students is less than that in conventional classrooms (Murday, Ushida, & Chenoweth, 2008). As a result, instructors need to rely on the self-motivation and responsibility of students in OLL classes (Gilbert, 2001). The belief about the degree of familiarity with online learning and the level of computer knowledge seems to increase the positivity of PBC beliefs toward attending OLL classes. OLL learners believe that previous experiences with online learning help them to succeed in OLL classes. OLL students believe that they have sufficient computer knowledge and skills to take OLL classes. Others believe that they do not have a strong computer background, which might prevent them from attending OLL classes. They believe that they do not have sufficient skill with computers to confidently enroll in OLL classes.

Figure 1 shows that the indirect measures of the FLL group (PBC1, PBC2, and PBC4) significantly predicted the PBC direct measure's mean. In contrast, PBC3 and PBC5 cannot predict the mean. PBC1 (living close to the university campus), PBC2 (availability of campus facilities, such as cafeterias, coffee shops, and places to study, as well as classroom amenities, such as air conditioning, lights, chairs, and tables), and PBC4 (having family and social responsibilities) were influential factors in predicting students' PBC with respect to their ability to attend face-to-face EFL reading lessons. PBC3 (transportation difficulties, such as traffic jams and car accidents) and PBC5 (illness, exhaustion, or lack of sufficient sleep) did not influence students' self-efficacy in attending face-to-face EFL reading lessons. This result shows that students did not have transportation problems when attending face-to-face classes in the context of this study. This finding matched the results of the OLL group. Distance to campus did not predict students' self-efficacy in attending online classes.

Figure 2 shows that the indirect measures for the OLL group (PBC2, PBC3, and PBC5) significantly predicted the PBC direct measure's mean of the OLL group. In

contrast, the PBC1 and PBC4 indirect measures did not significantly predict the PBC direct measure's mean. PBC2 (the availability of Internet access), PBC3 (having adequate knowledge about the use of a computer and surfing the Internet), and PBC5 (having adequate training in how to learn online) were important factors in predicting students' self-efficacy beliefs in terms of attendance of online EFL reading lessons. PBC1 (living close to campus) and PBC4 (having sufficient financial resources to purchase a computer and an Internet subscription) were insignificant factors in the prediction of the mean of PBC beliefs in online EFL reading lessons. This result indicates that students did not have financial problems that prevented them from attending online EFL classes. This outcome was expected because students attend the university without paying tuition. In addition, they received monthly allowances to help them pay for their expenses.

At the theoretical level, the results of this study are in line with the recommendations of Crookes and Schmidt (1991) and Dörnyei (1994), who encouraged the use of new theoretical models in researching motivation. The results of the current study show the need to avoid overused theoretical models (e.g., Bandura's theory) that investigate the beliefs of language learners about their ability to learn a language. By using theories, models, and questionnaires that have not been used by many applied linguists, researchers are encouraged to increase innovations and examine language-learning problems from different perspectives. The results of the AMOS path diagram outputs (see Figs. 1 and 2) demonstrate the successful use of Ajzen's PBC concept to elicit and investigate language learners' beliefs about their ability to learn in FLL settings and OLL settings.

At the methodological level, the results of this study can support the recommendation to use an MMR design to investigate language-learning beliefs. The results of this study are in line with those of researchers (e.g., Brown, 2014; Dörnyei, 2007; Hashemi, 2012) who recommend the use of the MMR design in applied linguistics research. It is important to note, however, that beliefs are ambivalent. For example, one belief that may facilitate or prevent students' attendance to OLL classes is the belief regarding the ability to increase and decrease the amount of effort exerted when attending OLL classes. Language learners believe that they will be able to save the effort and time that would be spent on going to the campus. Others believe that family responsibilities may increase when they start taking OLL classes at home and spend most of their time at home. The results of this study show the complexity of the investigation of language learners' PBC beliefs using quantitative data only.

It would be very difficult to understand language learners' beliefs by examining them using only one data collection tool. The circulation of qualitative and quantitative research studies is necessary to understand PBC beliefs on language learning and is the primary reason for conducting this study in three phases. The first phase was qualitative, in which the researcher conducted interviews and open-ended surveys to build the questionnaire items. The second phase was quantitative, in which the results were derived from regression analyses of the closed-ended questionnaire items. The third phase was qualitative, in which the researcher used the questionnaire items to guide the interviews with the participants. Using this multiphase design, also called the sandwich model, helped the researcher to understand the issues in more detail.

It is important to note, however, that beliefs are personal and often differ substantially between similarly situated individuals. For example, one student might firmly believe that OLL classes will save him/her significant time and effort. In not having to

commute to campus, the student can devote that time and energy to other endeavors. Another student might legitimately avoid OLL classes. S/he could reasonably think that there will be too many distractions to study at home and that it is better to go to campus. This shows the inherent complexities in researching highly personal belief systems. It is very difficult to glean useful information from language-learner research using only quantitative data. In sum, language-learning PBC belief research should utilize both qualitative and quantitative data.

This article focuses on PBC, which influences motivation. Providing different aspects of motivation is difficult. Williams (1994) briefly states, "there is no room for simplistic approaches to such complex issues as motivation" (p. 84). After reviewing several motivation theories, Dörnyei (1998) concluded that motivation is indeed a multifaceted rather than a uniform factor and that no theory has been developed to represent it in its total complexity. Researchers should be aware that the specific motivation concept they are focusing on likely represents only a segment of an intricate psychological construct. In addition, the results of this study are limited to the Saudi context at the university level. Researchers might obtain different results in various other contexts when investigating language learners' PBC beliefs. The influence of context on the beliefs of language learners is strong. A parallel study in another part of the world using the same methodologies could yield different results and conclusions. In short, context with respect to language learners' beliefs is critical. Future research studies might apply Ajzen's PBC concept in other countries, educational institutions, and educational levels. In addition, teacher presence, social presence and emotional presence increase the effectiveness of online learning. Online courses that focus on creating social interaction might foster a greater sense of community, which raises student engagement. Future studies might investigate the correlation between the social presence of teachers and learners' engagement in an online course.

Conclusion

To summarize, as a result of the importance of language learners' beliefs about their abilities to learn languages, this study was designed to investigate the factors that influence language learners' beliefs using Ajzen's PBC concept and to avoid overused models. The results show that some factors can help language educators predict language learners' beliefs about their ability to attend and learn in language classes in face-to-face and online environments. The results of this study also suggest the use of different models and theories to investigate language-learning processes to increase innovation and examine language-learning problems from different perspectives. The results of this study indicate the need to use mixed-methods designs to investigate language learners' motivation. The use of an MMR design helps to clarify language-learning issues in more depth. This empirical evidence is needed to push back against administrative pressure to push EFL classes online and to consider learners' backgrounds in the design of new curricula. Some educators need empirical evidence to help in their resistance against other faculty members and/or administrators who insist on expanding the use of online EFL classes for financial or other reasons not related to academic learning outcomes. This research will help drive the body of academic knowledge forward and support efforts to ensure that curricula are designed in a way that best serves the students.

Appendix

Table 3 FLL group questionnaire details

Theme	Statements of the Survey Items	Scale 1	Scale 2	Scale 3	Scale 4	Scale 5	Scale 6
PBC Direct Measure	I am confident that I could attend face-to-face English reading lessons at. .. University this semester if I wanted to	Strongly Yes	Quite Yes	Slightly Yes	Slightly No	Quite No	Strongly No
PBC Direct Measure	For me, attending face-to-face English reading lessons at. .. University this semester is	Strongly Easy	Quite Easy	Slightly Easy	Slightly Difficult	Quite Difficult	Strongly Difficult
PBC Direct Measure	Whether I attend face-to-face English reading lessons at. .. University this semester or not is up to me.	Strongly Agree	Quite Agree	Slightly Agree	Slightly Disagree	Quite Disagree	Strongly Disagree
Living Close To The University Campus	The distance between my where I live this semester and the. .. University campus is	Strongly Close	Quite Close	Slightly Close	Slightly Far	Quite Far	Strongly Far
Availability Of Campus Facilities	The condition of the... University campus facilities, such as the cafeteria, coffee shops, and places to study, and that of classroom facilities, such as the air conditioning, lights, chairs, and tables, are	Strongly Good	Quite Good	Slightly Good	Slightly Bad	Quite Bad	Strongly Bad
Transportation Difficulties	How often do you have transportation difficulties, such as traffic jams and accidents, that prevent you from attending face-to-face English reading lessons at. .. University this semester?	Always	Very Frequently	Often	Occasionally	Rarely	Never
Having Family And Social Responsibilities	How often do you have family and social responsibilities that prevent you from attending face-to-face English reading lessons at. .. University this semester?	Always	Very Frequently	Often	Occasionally	Rarely	Never
Being Ill Or Tired, Or Not Having Sufficient Sleep	How often do you feel ill or tired or have insufficient sleep to the point that it prevents you from attending face-to-face English reading lessons at. .. University this semester?	Always	Very Frequently	Often	Occasionally	Rarely	Never
Living Close To The University Campus	Living close to. .. University's campus will help me to attend face-to-face English reading lessons this semester.	Strongly Agree	Quite Agree	Slightly Agree	Slightly Disagree	Quite Disagree	Strongly Disagree
Availability Of Campus Facilities	The availability of campus facilities, such as the cafeteria, coffee shops,	Strongly Agree	Quite Agree	Slightly Agree	Slightly Disagree	Quite Disagree	Strongly Disagree

Table 3 FLL group questionnaire details *(Continued)*

Theme	Statements of the Survey Items	Scale 1	Scale 2	Scale 3	Scale 4	Scale 5	Scale 6
	and places to study, and that of classroom facilities, such as the air conditioning, lights, chairs, and tables, help me to attend face-to-face English reading lessons at. .. University.						
Transportation Difficulties	Having transportation difficulties, such as traffic jams and car accidents, prevent me from attending face-to-face English reading lessons at. .. University	Strongly Agree	Quite Agree	Slightly Agree	Slightly Disagree	Quite Disagree	Strongly Disagree
Having Family And Social Responsibilities	Having family and social responsibilities prevent me from attending face-to-face English reading lessons at. .. University this semester.	Strongly Agree	Quite Agree	Slightly Agree	Slightly Disagree	Quite Disagree	Strongly Disagree
Being Ill Or Tired, Or Not Having Sufficient Sleep	Being ill or tired or not having enough sleep make it difficult for me to attend face-to-face English reading lessons at. .. University this semester	Strongly Agree	Quite Agree	Slightly Agree	Slightly Disagree	Quite Disagree	Strongly Disagree

Table 4 OLL group questionnaire's details

Theme	Statements of the Survey Items	Scale 1	Scale 2	Scale 3	Scale 4	Scale 5	Scale 6
PBC Direct Measure	I am confident that I can attend online English reading lessons at. .. University this semester if I wanted to	Strongly Yes	Quite Yes	Slightly Yes	Slightly No	Quite No	Strongly No
PBC Direct Measure	For me to attend online English reading lessons at. .. University this semester is	Strongly Easy	Quite Easy	Slightly Easy	Slightly Difficult	Quite Difficult	Strongly Difficult
PBC Direct Measure	Whether I attend online English reading lessons at. .. University this semester or not is up to me.	Strongly Agree	Quite Agree	Slightly Agree	Slightly Disagree	Quite Disagree	Strongly Disagree
Living Close To The University Campus	The distance between my where I live and. .. University campus this semester is	Strongly Close	Quite Close	Slightly Close	Slightly Far	Quite Far	Strongly Far
The Availability Of Internet Access	How often do you have access to the Internet?	Always	Very Frequently	Often	Occasionally	Rarely	Never
Having Adequate Knowledge About The Use Of A Computer And	How do you evaluate your knowledge about the use of computer and surfing	Strongly Good	Quite Good	Slightly Good	Slightly Bad	Quite Bad	Strongly Bad

Table 4 OLL group questionnaire's details *(Continued)*

Theme	Statements of the Survey Items	Scale 1	Scale 2	Scale 3	Scale 4	Scale 5	Scale 6
Surfing The Internet	the Internet?						
Having Adequate Financial Resources To Purchase A Computer And An Internet Subscription	Do you have enough financial resources to buy computer and Internet subscription?	Strongly Yes	Quite Yes	Slightly Yes	Slightly No	Quite No	Strongly No
Having Adequate Training On How To Learn Online	How do you evaluate your training in how to learn online such as learning languages	Strongly Good	Quite Good	Slightly Good	Slightly Bad	Quite Bad	Strongly Bad
Living Close To The University Campus	Living close to. .. University campus will not help me to attend online English reading lessons.	Strongly Agree	Quite Agree	Slightly Agree	Slightly Disagree	Quite Disagree	Strongly Disagree
The Availability Of Internet Access	The availability of access to the Internet helps me to attend online English reading lessons at. .. University this semester.	Strongly Agree	Quite Agree	Slightly Agree	Slightly Disagree	Quite Disagree	Strongly Disagree
Having Adequate Knowledge About The Use Of A Computer And Surfing The Internet	Having adequate knowledge about the use of computer and surfing the Internet helps me to attend online English reading lessons at. .. University	Strongly Agree	Quite Agree	Slightly Agree	Slightly Disagree	Quite Disagree	Strongly Disagree
Having Adequate Financial Resources To Purchase A Computer And An Internet Subscription	Having enough financial resources to buy computer and Internet subscription helps me to attend online English reading lessons at. .. University?	Strongly Agree	Quite Agree	Slightly Agree	Slightly Disagree	Quite Disagree	Strongly Disagree
Having Adequate Training On How To Learn Online	Having adequate training in how to learn online will help me to attend online English reading lessons at. .. University	Strongly Agree	Quite Agree	Slightly Agree	Slightly Disagree	Quite Disagree	Strongly Disagree

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Availability of data and materials
The author has the data available in paper form. He can scan samples and send them to anyone who is interested. It would be difficult for the author to scan all the data.

Competing interests
The author declares that he has no competing interests.

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