

The nature of human experience with language and education

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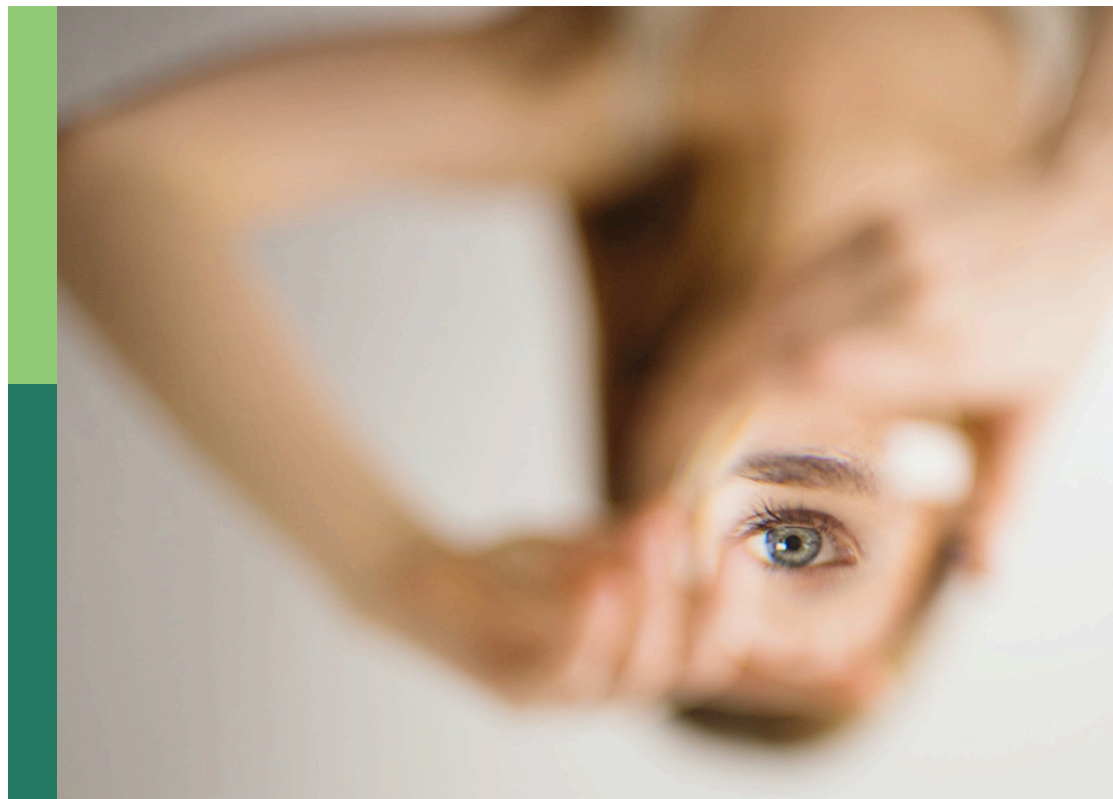
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The nature of human experience with language and education

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Editorial: The nature of human experience with language and education

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KEYWORDS

ESL/EFL, technology in education, innovative approaches, psychology of language learning, language and education

Editorial on the Research Topic

[The nature of human experience with language and education](#)

This issue was designed with the aim of finding ways to foster ESL/EFL instruction and learning. The characteristics of language learners and their motives and learning strategies are in constant change, especially during these post-pandemic times. Hence, language teachers are unable to find ways to cope with these ever-changing variables. Due to the fast transition to online classes owing to the pandemic, language teachers are in need of a more dynamic conception of language instruction than that offered by the traditional ways of teaching. In this issue, we explored the nature of the human experience with language and education, with specific reference made to innovative instructional strategies to foster learner engagement and the effectiveness of online teaching and learning modes.

By doing so, we have provided insights into how thematic instruction affects students' language learning experiences by bringing to the fore how listening comprehension has been promoted and how vocabulary in the target language has been developed. Through thematic instruction, learners are immersed in contexts that facilitate their language practice and comprehension of the vocabulary in the target language. It was revealed that learning attitudes and thematic language instruction resulted in higher listening achievement than that of the traditional teaching model and that thematic language teaching boosts speaking skill achievement by lowering learning anxiety.

The investigation of the application of multimedia-assisted English song-integrated language instruction is another contribution of this issue. Being a student-centered and technology-based method, multimedia-assisted English song-integrated language instruction is effective in terms of enhancing learners' attention, memory, and active learning, which results in desirable learning outcomes. This type of instruction was delivered by multimedia equipment that is available to schools to improve the environment of the e-classroom. This study found that the major benefit of this method was that it promoted learners' interest in learning English. Differing from traditional classroom teaching, which is limited to place, time, resources, and materials, multimedia-assisted language instruction has a great potential for seamless and ubiquitous learning and instruction. In terms of learning outcomes, this study revealed that multimedia-assisted song-integrated English teaching improved listening, speaking, reading, and writing skills in the target language. Last but not least, this method promoted learning outcomes.

Thanks to this issue, we also had the opportunity to provide the results of the effects of milieu teaching on communication skills and language learning confidence. Milieu teaching was proved to stimulate higher active communication in comparison to traditional teaching. Further, it was shown to have a great potential to improve communication skills and increase sentence length and spontaneous speech. Accordingly, milieu teaching boosted language learning confidence by enabling higher thinking and behavior compared to traditional teaching.

In another article, it was explored whether or not daily practice with the language learning software Elevate improved university students' English proficiency. This study revealed that students had positive attitudes toward creative language learning methods. More specifically, they perceived gamified language teaching methods as attractive, enjoyable, and interesting. Gamified applications were found to be effective in improving students' interest, providing positive learning outcomes, and getting them excited about language learning. The interactive, user-centered experiences enhanced by gamification elements added to the desirability of such applications.

To conclude, this issue highlighted the importance of grasping the individual needs of learners to monitor instruction and finding ways to entice ESL/EFL learners for a rewarding language learning journey. Hopefully, the articles contained in this issue form a base for further research on promoting learner engagement and learning outcomes.

Author contributions

All authors listed have made a substantial, direct, and intellectual contribution to the work and approved it for publication.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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The Mediating Effect of Social Anxiety on the Relationship Between Social Media Use and Body Dissatisfaction Among University Students

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Body dissatisfaction has become increasingly common among women and young adults and has only become worse in the digital age, where people have increased access to social media and are in constant competition and comparisons with their “friends” on their different social media platforms. While several studies have looked at the relationship between social media and body dissatisfaction, there is an obvious dearth of empirical studies on the mediating role of social anxiety- a gap this study hoped to address. Using a cross-sectional research design, this study examined the mediating role of social anxiety on the relationship between social media usage and body dissatisfaction. The sample consisted of 432 students from Kampala International University and Victoria University in Uganda. The findings show a significant positive relationship between social media usage and body dissatisfaction. The findings prove that heavy users of social media are significantly more likely to suffer from body dissatisfaction. In a similar vein, the findings show that there is a significant positive relationship between social media usage and social anxiety. This suggests that people that frequently make use of social media have a much higher chance of suffering from social anxiety, that is the inability or difficulty to engage in social interactions, than people that rarely or moderately make use of social media. Finally, findings show that social anxiety mediates the relationship between social media usage and body dissatisfaction. It indicates that people with high levels of social anxiety are more likely to suffer from body dissatisfaction as a direct result of heavy social media usage. These findings imply that although heavy users of social media tend to have a more negative perception of their body, if these same users can properly engage in social interactions, then this might mitigate the negative effects of social media usage (in terms of body dissatisfaction).

Keywords: social anxiety, body dissatisfaction, body image, social media use, body satisfaction

INTRODUCTION

Body dissatisfaction usually arises as a result of negative thoughts or feelings about one's body image. Perception of one's body image is, therefore, a prerequisite to feelings of body dissatisfaction. Body image is often described as a person's perception, emotions, and thoughts about their body (Jiotsa et al., 2021). Body images are usually a reflection of their mirror image, combined with social expectations of what a good or bad body is. This conception of body image is created by using body ideals as promoted by mainstream media, society, peers, and family (Greene et al., 2017).

Media has been playing a role in exposing people to what they consider the ideal body right from a young age (Blowers et al., 2003). Children are told that a certain actress has the best body, and a certain athlete has the perfect physique and so they grow up thinking anything short of that is not sought after. So, depending on what that image is at a particular time, people are somewhat conditioned by the mass media and popular culture to seek such an image which in certain cases may result in body dissatisfaction. So, in a culture or a period where thinness is seen as ideal, overweight people will increasingly feel discontented with their bodies and seek ways to "improve" which may lead to an increase in eating disorders and anorexia (Stormer and Thompson, 1996). Moreover, body dissatisfaction is characterized by a difference in perception between one's real body and their ideal body.

As mentioned above and according to numerous studies, body dissatisfaction is a major factor in the development of eating disorders (Attie and Brooks-Gunn, 1989; Killen et al., 1996). People drastically reduce their food intake which can lead to anorexia or even dramatically increase their food consumption which can, in turn, lead to obesity. Social comparison is another major factor that greatly influences body image satisfaction or dissatisfaction. Social comparison is often combined with the internalization of the ideal body image and affects how individuals perceive their body image. Studies have shown that individuals who compare their physical attributes to people they think are more beautiful than them are significantly more likely to be dissatisfied with their body image and to develop eating disorders (Dittmar and Howard, 2004; Corning et al., 2006; McKee et al., 2013; Ferguson et al., 2014). Social media has by its very definition made it easier and increasingly more likely for users to compare themselves to others in terms of social acceptance yardsticks/standards, like beauty, success, ability, etc. As earlier stated, these comparisons combined with the reach and ubiquity of social media tend to negatively impact body dissatisfaction among social media users.

Anxiety has also been linked to higher social media usage and emotional investment in body image (Jenkins-Guarnieri et al., 2013). However, as explained in the next section, not many studies have considered the mediating role of anxiety on the relationship between social media usage and body dissatisfaction, an aim that this study aims to achieve.

This study, therefore, seeks to find out how social anxiety influences the relationship between social media usage and body dissatisfaction among university students in Uganda. The assumption is that social media usage plays a role in the

development of body dissatisfaction. The researchers posit that university-aged individuals, especially women, will be most likely to be negatively impacted by social media usage. However, the researchers want to test whether social anxiety (or lack of) can mediate the relationship between social media usage and body dissatisfaction.

THEORETICAL PERSPECTIVE

This study was premised on two theories, namely, social identity theory and social comparison theory.

Social media makes it possible for its users to explore, control, and manage their online identities which may influence their sense of self-worth (Taylor-Jackson and Moustafa, 2021). Social media users more often than not project the best versions of themselves, because, most times, they have control over what other people can see and know about them. They decide what needs to be shared and thereby knowingly or unknowingly control how people perceive them. The perception of themselves they create online might not be attainable in the real world. Social media users have the means to edit their pictures to appear slimmer, fairer, or even in a completely different location. Once the users are fully immersed in their self-constructed social media world, their "real-life identity" may get distorted (Taylor-Jackson and Moustafa, 2021). According to Aiken (2016), the act of portraying one's "aspirational self" online can have a deleterious effect on their future self-perception and mental wellbeing if care is not taken.

Social identity theory describes self-concept and the feeling of self-worth is derived from the perceived membership of a certain group or class within a given society (Turner and Oakes, 1986). Because social groups/online communities are limitless, it might be mentally and psychologically exhausting for individuals to build networks and maintain a particular image across those various groups. Turner and Oakes' (1986) study is particularly relevant to this study because it shows how social groups one belongs to or aspires to belong to can impact their mental wellbeing and lead to a deluge of mental issues including, but not limited, to body dissatisfaction.

As one seeks to define their online and real-life identity, they often compare themselves to people they think are better. So, for social media users, there is a tendency to compare themselves to models, actors, and influencers while using them as the standard to gauge their progress. This action is often referred to as social comparison. Social comparison theory by Festinger (1954) posited that people evaluate their self-worth, value, and abilities by comparing themselves to other people. There are two forms of comparisons according to Festinger, namely; upward comparison and downward comparison.

Upward comparison is a situation where individuals compare themselves to people they think are doing better than them in terms of what their concern is at that moment. So, for someone concerned with success, they might compare themselves with more successful people, depending on how they define success. People concerned with body image will compare themselves with people they think, or society says, are prettier. Upward

comparison has been linked with a decline in levels of self-esteem. Vogel et al. (2014) explained that social media makes comparison a lot easier. The study by Vogel et al. further explained that this relationship was mediated by increased exposure to profiles with positive content, like healthy lifestyle regimens, motivational quotes, and so on. The implication is that the more people make use of social media, the lower their self-esteem is unless they are also highly exposed to positive content on a platform. Similarly, studies by Feinstein et al. (2013), showed that people who make a lot of comparisons on social media have a significantly higher number of depressive symptoms than those who do not compare themselves to others. Downward comparison on the other hand refers to when individuals compare themselves with people they perceive to be less fortunate. In a lot of cases, people do this to improve their sense of self-worth and self-enhancement.

Downward or upward comparison is made easier when one uses social media because social media is a window through which people experience new worlds and share experiences that would have otherwise remained inaccessible. So, in the quest to find an identity or a social group to belong to, people seek out those that are similar or who they aspire to be and “follow” them. By following them, and getting drawn into their reality, the chances of becoming behaviorally or psychologically influenced become increasingly more likely.

These theories are relevant to this study because they explain the relationship between social media usage, group identity, and perception. Furthermore, the theories explain why this relationship exists. By understanding the relationship between these two variables, it will be easier to understand how anxiety mediates the relationship.

REVIEW OF RELEVANT LITERATURE AND DEVELOPMENT OF HYPOTHESES

Social media refers to different internet-based platforms that allow users to connect and interact with one another in different formats- pictures, texts, videos, and many others (Jarrar et al., 2020). According to Statista (2021), 3.78 billion people worldwide are social media users, representing over 50% of the world population. Therefore, understanding the impact of social media usage on body image is important because people spend 2 h and 25 min on social media on average every single day (Chaffey, 2021). Kim (2017) explained that understanding the impact of social media on the wellbeing of individuals is important considering the increasing levels of mental health issues. Addiction to social media is well-documented and has long been considered a major issue in academia (Kim, 2017; Coyne et al., 2020; Karim et al., 2020).

Social media, according to Keles et al. (2020) can be considered double-edged, meaning that it has its benefits and its drawbacks. The benefits of social media include the creation of platforms for people to express themselves in a way that might have otherwise been difficult to attain. Social media also allows people to receive social support at a level that is almost impossible offline (Deters and Mehl, 2013; Lilley et al., 2014; Lenhart et al., 2015). On the flip side, various studies have also shown

a significant positive relationship between social media usage and psychological problems. For instance, a study reviewing 11 previous research papers studying social media usage and depression in children and young adults showed a statistically significant relationship between the two variables (McCrae et al., 2017). A similar study analyzing 23 different pieces of research on Facebook usage and psychological issues among young adults and adolescents showed a correlation between the variables (Marino et al., 2018), an indication that the more young adults and adolescents make use of social media, the higher the likelihood that they will develop psychological problems.

Contrary to the above, one major factor influencing the relationship between mental health and social media usage is social support. Social media allows people to strengthen their relationships with existing friends and cultivate new relationships online, which in turn can help reduce the feeling of isolation and loneliness, thereby indirectly improving the mental wellbeing of users (O’Keeffe et al., 2011). Various studies have shown that people with low social support tend to have more mental health issues than people with a strong social support system or network (Maulik et al., 2011). While it does appear that social support (which social media makes easy and convenient to get) is very important to the mental well-being of people, Teo et al. (2013) indicated in their studies that the quality of this support is even more important than the quantity. People might have a lot of friends on social media platforms and still feel alone and rejected, while others with a low friend count might get all the support they need online. This is a reflection on the types of interactions and relationships one has on social media and can be the major factor in determining how one sees themselves and their place in society.

Body image issues have become a front-burner issue in the media, academia, and psychology. Studies have shown that young adults, and adolescents, especially females, suffer a lot from body dissatisfaction. In a study by FHEHealth (2020), on body image and social media usage, 1,000 men and woman were surveyed, and the findings showed, among other things, that 87% of women compared their bodies to other people on social media, as compared to 65% of men who did the same. Based on the same study, 50% of women thought they look worse than those they compared with on social media, while about 37% of men thought the same. In realization of the impact of social comparison on the mental health of people, Norway, in 2021, passed the “Retouched photo law” as an amendment to the country’s Marketing Control Act. The Norwegian Ministry of Children and Families explained that the law was created to “raise awareness among people that the perfect bodies in advertisements do not show people as they appear in real life” (The Washington Post, 2021).

Furthermore, a study by Ferguson et al. (2014) who went a bit further by comparing the effect of traditional media (TV), peer relations, and social media on body dissatisfaction found out that peer competition and social media usage both predicted, to varying degrees, negative body image outcomes. Although their findings clearly show that peer pressure had more of a negative effect on body image perception and social media has more of an effect on peer competition, the findings by Ferguson et al. do not show a direct relationship between social media

usage and body dissatisfaction, it does prove that social media increases peer competition which in turn can lead to feelings of body dissatisfaction.

Based on the foregoing, the following hypothesis was proposed:

H1: there is a significant positive relationship between social media usage and body dissatisfaction among university students in Uganda.

Preoccupation with social media by university students can manifest in the form of spending too much time on social media, having a strong motivation and inclination to make use of social media, and can lead to adverse effects on their social, professional, personal life, and mental wellbeing (Andreassen and Pallesen, 2014). The recent Covid-19 related lockdowns all over the world have forced people to seek solace and connection online and have led to an increasing reliance on social media for the littlest social connection. The pandemic and its resultant lockdowns have prolonged the time spent on social media generally and have led to an emergence of problematic social media usage and therefore might have negatively impacted the mental health of university students (Jiang, 2021).

Studies by Lepp et al. (2014) showed that prolonged and problematic use of social media can lead to increased levels of anxiety. A study by Thorisdottir et al. (2019) detailed social media use and anxiety levels among Icelandic youths and found that passive use of social media led to greater anxiety symptoms among both males and females. Their study also found that excessive use of social media, either passive or active, among students, invariably led to problematic use of social media which in turn could result in higher levels of anxiety. In a similar vein, studies by Hussain and Griffiths (2018) and Wong et al. (2020) found a significant relationship between problematic social media usage and anxiety.

Furthermore, studies by Zsido et al. (2020) on social fears and social media usage, found that individuals with social anxiety issues and low self-esteem tend to prefer computer-mediated communication instead of face-to-face communication which in turn can lead to excessive or pathological use of social media as a means to compensate for their lack of social interactions in real life.

A more recent study by Zsido et al. (2021) on the role of maladaptive cognitive emotion regulation strategies and social anxiety in problematic smartphone and social media use, reaffirms the relationship between social anxiety and social media usage. They explained that “individuals who are highly socially anxious prefer computer-mediated communication over face-to-face communication possibly due to the control and social liberation that it provides” (p. 1). Their findings showed a direct significant relationship between social anxiety and pathological social media usage. Based on the foregoing, it is clear that the negative impacts of social media usage usually manifest only when there is excessive usage of the platforms. Individuals that reported medium to low usage frequency do not usually develop these issues.

Based on this, the researchers propose the following hypothesis:

H2: There is a significant positive relationship between social media usage and anxiety levels among university students.

Social anxiety is usually a result of a personal evaluation of one's social situation, be it real or imagined (Schlenker and Leary, 1982). Previous studies showed that social comparison is linked to feelings of social anxiety (Jiang and Ngien, 2020). Social comparison, as earlier explained, consists of people's natural inclination to evaluate and compare their situation, skills, identity, and even performance with others (Festinger, 1954). Both upward and downward comparisons have been shown to often harm the mental wellbeing of individuals (Gilbert, 2000; Stein and Sareen, 2015). Antony et al. (2005) explained this by stating that people who compare themselves to other people (either upward or downward comparison) are significantly more likely to care about how other people perceive them which can affect their mental wellbeing (American Psychiatric Association, 2013).

Weeks et al. (2009) in their study on social comparison and social anxiety found out that social comparison was positively related to social anxiety, as well as increased fear of public scrutiny. In a similar study carried out by Mitchell and Schmidt (2014), the findings suggested that there is indeed a causal relationship between social comparison and social interaction anxiety. Also, Gregory and Peters (2017) concluded that social comparison is a major predictor of social anxiety disorder.

From the foregoing, it is clear that social media encourages social comparison, which in turn can have a negative impact on the anxiety levels of social media users. While these relationships appear to be well-established, very little is known about the mediating role of social anxiety on the relationship between social media usage and body dissatisfaction. This study is premised on the assumption that people with high levels of social anxiety will be more likely to suffer from body dissatisfaction irrespective of their social media usage. Based on the foregoing, the following hypothesis was developed:

H3: There is a mediating effect of social anxiety on the relationship between social media usage and body dissatisfaction.

METHOD

Study Design

The study made use of a cross-sectional research design. The cross-sectional study design is a type of observational design, and it investigates the outcome and exposures of the study participants at the same time. Questionnaires were distributed to study participants at the same time and the responses to the questionnaires were analyzed and interpreted. Participants were informed about the study's aim and were assured of confidentiality before they were asked to fill out the questionnaires.

Participant Recruitment

This study population consisted of students of Kampala International University and Victoria University in Uganda. This demographic was selected because the study focuses primarily on adolescents and young adults. This demography of respondents is predominantly university students since they fall between the ages of 18 and 25 mostly. The institutions were selected because they are situated in Kampala, which is the major city in Uganda and has good internet connectivity (a prerequisite for using

social media). By selecting university students in Kampala, the researchers were fairly confident that the respondents will be aware of and make use of social media. Also, the participants are expected to be literate enough to understand the study and answer the questions.

The age range (18–25 years old) was selected because current literature suggests that they are more likely to make use of social media and also be concerned about body image than any other age category (Duggan, 2015). The second inclusion criterion was that all participants in this study must be aware of and make use of at least 2 different social media platforms. In total, 432 students participated in this study (52% of which are females while 48% are male). The average age of the respondents was 21.3 years.

The researchers sent out a notice to students in both universities, clearly stating the criteria for selection to participate in the study. Based on this communication, over 557 students from both institutions indicated interest. After this stage of the selection process, the researchers removed students that did not meet the criteria, for instance, anybody above the age of 25 was disqualified from participating. At the end of this exercise, 432 students were left and allowed to participate in this study. The selected students were asked to report to the main auditorium at Victoria University, and the main hall of Kampala International University on different days (1 day apart for students from VU and those from KIU) where the purpose of the study was once again explained to them and their consent was collected.

See **Table 1** below for detailed demographic data.

Measures

To collect pertinent data, the researchers opted to make use of questionnaires that combine the following scales: Body Dissatisfaction Subscale from EDI-III (Garner, 2004), The State-Trait Anxiety Inventory (STAI), The Multidimensional Scale of Facebook Use (MSFU) by Frison and Eggermont (2015), and The Liebowitz Social Anxiety Scale (LSAS) (1987) (Leonard and Blane, 1988).

Section one of the questionnaire collected demographic data like age, course of study, income level, gender, and marital status. Section one also included the inclusion criteria question of social media usage. Respondents were required to confirm whether or not they make use of social media and the types of social media platforms they use frequently.

Section two of the questionnaire looked at social media usage. In this section, respondents were required to answer the questions as required in The Multidimensional Scale of Facebook Use (MSFU). Section three of the questionnaire included questions related to body dissatisfaction. This section of the questionnaire adopted the Body Dissatisfaction Subscale from EDI-III which was specifically designed to measure body dissatisfaction.

Finally, Section four of the questionnaire required the participants to answer questions related to anxiety. This section sought to find out whether the respondents suffer from anxiety or not. The Liebowitz Social Anxiety Scale (LSAS) was adopted for use in this section. The LSAS is a 24-item interviewer-rated scale that measures fear and avoidance (each on four-point scale) reported in social interaction and performance

situations (Liebowitz, 1987). The LSAS has demonstrated validity and reliability as a self-report measure. Separate indices can be calculated for fear and avoidance factors for both social interaction and performance. Reliability for the fear and avoidance subscales has ranged from 0.81 to 0.92 and from 0.83 to 0.92, respectively (Orsillo, 2001).

Procedure

While distributing the questionnaires, the researchers made use of stratified random sampling, to separate students in the Social Sciences and Arts from those in the STEM field. This way every program category is represented in the study. The breakdown of the distribution is as follows.

Data Analyses

The fundamental purpose of using statistical analysis to analyze data “is to assist in establishing the plausibility of the theoretical model and to estimate the degree to which the various explanatory variables seem to be influencing the dependent variable” (Coorley, 1978, p. 13). In the same vein, the main objective of this study was to empirically examine the mediating effect of social anxiety on the relationship between *social media usage and body dissatisfaction among university students in Uganda*. Accordingly, the raw data must be subjected to certain preliminary tests (Hair et al., 2010). JAMOV 1.8.4.0 software was used for data coding, tests for missing data, outliers, internal consistency, and normality. The current study made use of the “MEDMOD” library in JAMOV to test the hypotheses for mediation.

The internal consistency was good (Social media use: $\alpha = 0.88$, 95% CI[0.86, 0.89]; $\omega = 0.89$, 95% CI[0.85, 0.90], n items = 13, Social anxiety: $\alpha = 0.87$, 95% CI[0.85, 0.88]; $\omega = 0.86$, 95% CI[0.84, 0.89], n items = 24, and body dissatisfaction: $\alpha = 0.86$; 95% CI[0.84, 0.87]; $\omega = 0.88$, 95% CI[0.85, 0.91], n items = 10).

Scatterplot of standardized residuals showed that the data met the assumptions of homoscedasticity, and linearity, and the residuals were approximately normally distributed and contained no outliers (*Std. Residual Min* = -2.13 , *Std. Residual Max* = 2.91). Multicollinearity was not a problem (Social media use, *Tolerance* = 0.92 , *VIF* = 1.06 ; Social anxiety, *Tolerance* = 0.94 , *VIF* = 1.03) and the assumption of independent errors (*Durbin-Watson value* = 2.1) was equally met.

RESULTS

Hypothesis: *There is a mediating effect of social anxiety in the relationship between social media usage and body dissatisfaction.*

To achieve the main objective of this study, which was to examine the mediating effect of social anxiety on the relationship between social media usage and body satisfaction, mediation was tested using the MEDMOD library in JAMOV and the results indicated a significant positive relationship between *social media use and body image dissatisfaction* ($r = 0.420$, $p < 0.001$), suggesting that heavy social media users tend to feel more dissatisfied with their body image. Also, a significant positive relationship between *social media use and social anxiety* ($r = 0.316$, $p < 0.001$) was found, suggesting that the more anxious

TABLE 1 | Demographic data.

S/N	Demographic variable		Frequency	Percent
1	Gender	Male	248	57
		Female	175	43
2	Age	18–21	221	51
		22–25	211	49
3	Academic level	Undergraduate	348	80.6
		Postgraduate	84	19.4
4	Field of study	Social Sciences, Humanities, and Liberal Arts	296	68.5
		STEM field	136	31.5
5	Institution	Victoria University	159	36.8
		Kampala International University	273	63.2
Total			432	100%

a person feels, the more likely the person spends more time or uses social media and vice versa.

The results of the mediation show that social media use is positively correlated to social anxiety $\beta = 0.562$, $SE = 0.040$, $z = 14.01$, $p < 0.001$, and body image dissatisfaction is positively related to social anxiety, $\beta = 0.520$, $SE = 0.028$, $z = 18.71$, $p < 0.001$. Moreover, social media use has a positive relationship with body image dissatisfaction $\beta = 0.075$, $SE = 0.026$, $z = 2.86$, $p < 0.001$.

The effect of social media use on levels of body image dissatisfaction is partially mediated via the level of social anxiety. As **Table 2** illustrates, the regression coefficient between social media use and levels of body image dissatisfaction and the regression coefficient between social anxiety and levels of body image dissatisfaction are significant. The indirect effect was 0.292, and this indirect effect is statistically different from zero, as shown by a 95% bootstrap confidence interval ranging from 0.2341 to 0.3502 which is above zero. The indirect effect is statistically significant ($p < 0.001$).

The indirect effect of 0.292 means that two participants who differ by one unit in their reported social media use are estimated to differ by 0.292 units in their reported body image dissatisfaction. As a result, heavy users of social media were more likely to experience social anxiety (due to the positive value obtained), which in turn translates into higher levels of body image dissatisfaction (due to the positive value obtained).

DISCUSSIONS OF RESULTS

The result of hypothesis 1 testing, showed a significant positive relationship between social media use and body image dissatisfaction. This supports the findings by FHEHealth (2020) where an extensive study was carried out targeting over 1,000 participants. The findings showed that over 85% of women and 65% of men who used social media regularly compared their bodies to other people on social media. Of this number, 50% of the women ended up feeling that they look worse than people they competed with on social media. Their findings showed a clear relationship between the frequency of social media usage and body dissatisfaction. Other studies have addressed the

issue of body dissatisfaction as a psychological issue and have found that the more time spent on social media, the higher the likelihood of the user to develop an unrealistic definition of beauty, which in turn can lead to higher levels of body dissatisfaction (Maulik et al., 2011; O’Keeffe et al., 2011; Teo et al., 2013). By proving hypothesis one correct, this finding supports those of Ferguson et al. (2014) who also found out that social media usage increases social comparison which in turn can lead to increased levels of body dissatisfaction among pathological users of social media.

The results of hypothesis 2 testing showed a significant positive relationship between social media use and anxiety. The implication of this is that the more people make use of social media, the higher the likelihood of developing anxiety issues is. This finding supports those of Lepp et al. (2014) who found out that prolonged and problematic use of social media can lead to an increase in levels of anxiety. Similarly, findings by Thorisdottir et al. (2019) which showed that problematic use of social media can lead to higher levels of anxiety, are supported. Although studies by Thorisdottir et al. (2019) differentiated social media usage into passive and active usage, their findings showed that irrespective of the type of usage, the more time spent on social media, the higher the tendency for users to develop anxiety problems. This finding lends credence to those by Zsido et al. (2020, 2021) who found a significant relationship between social anxiety and social media usage which implies that the more people make use of social media, the higher the tendency that they will develop high levels of body dissatisfaction.

Hypothesis 3 was tested using mediation analysis and the result showed that social media use is positively correlated to social anxiety. It also showed a positive relationship with body image dissatisfaction. The findings further showed that the effect of social media use on levels of body image dissatisfaction is partially mediated via the level of social anxiety. The findings showed that heavy users of social media were more likely to experience social anxiety which in turn translates into higher levels of body image dissatisfaction.

Based on this finding, it can be concluded that users that frequently make use of social media, referred to in this study as heavy users, are significantly more likely to develop social

TABLE 2 | Mediation estimates of the mediating effect of social anxiety on the relationship between social media usage and body dissatisfaction.

Effect	Estimate	SE	Z	P	% mediation
Mediation estimates					
Indirect	0.2920	0.0253	11.56	< 0.001	79.6
Direct	0.0750	0.0262	2.86	0.004	20.4
Total	0.3670	0.0313	11.73	< 0.001	100.0
Path estimates					
Social media use →	Social anxiety	0.5619	0.0401	14.01	< 0.001
Social anxiety →	Body image Dissatisfaction	0.5196	0.0278	18.71	< 0.001
Social media use →	Body image dissatisfaction	0.0750	0.0262	2.86	0.004

Mediation analysis using JAMOV! 1.8.4.0 software was conducted to examine the indirect effect of social media use on body image dissatisfaction through social anxiety.

anxiety which in turn will invariably lead to high levels of body dissatisfaction. The implication is that users that suffer from social anxiety are more likely to feel the negative effect of heavy social media usage, especially in the form of body dissatisfaction. The findings of this study support those by Gregory and Peters (2017) who concluded that social comparison on social media is a major predictor of social anxiety disorder. However, it is clear from the literature above that very little is known about the mediating role of social anxiety on the relationship between social media usage and body dissatisfaction. The findings of this study are unique in the sense that the study charts a new course in understanding the relationship between social media usage and body dissatisfaction by introducing a hardly discussed variable into the mix, namely, social anxiety.

Furthermore, the findings of this study partially support the social identity theory which posits that people derive a sense of self-worth by the inclusion or acceptance into a certain group or class in society (Turner and Oakes, 1986). Findings of this study have shown that if people do not meet the perceived standards set by people they look up to on social media in terms of beauty, then they begin to lose their sense of self-worth and start feeling like they are not as good or as beautiful. The support is partial because it was not fully confirmed in this study that people seek to belong to a certain group or merely just want to look like their social media mentors, influencers, or idols. By not distinctly studying this, it will be difficult to categorically state that the social identity theory was fully confirmed. The findings of this study however fully support the social comparison theory because the study shows that people who make frequent use of social media define or evaluate their sense of self-worth, beauty, and value based on their perception of others on social media. By proving this hypothesis right, the researchers have shown that people most engage in upward comparison on social media which in turn has an effect on their self-esteem and leads to body dissatisfaction.

CONCLUSIONS AND RECOMMENDATIONS

This study has charted a new course in the study of social media usage, mental health, and its manifestations on youths and young adults. By examining the mediating role of social

anxiety on the relationship between social media usage and body dissatisfaction, this study has approached media effects studies from a novel perspective. The issue of body dissatisfaction among today's youths is a front-burner issue and has become one of the most talked-about issues in modern media. Body positivity and acceptance are encouraged and actively sought in both academic and general society, so any study that clarifies this issue and sheds light on the root causes of body dissatisfaction will surely help in developing a long-lasting solution using modern-day techniques.

This study sought to find out the mediating role of social anxiety on the relationship between social media usage and body dissatisfaction. The findings of this study showed a significant positive relationship between social media usage and body dissatisfaction. The findings proved that heavy users of social media are significantly more likely to suffer from body dissatisfaction. In a similar vein, the findings also showed that there is a significant positive relationship between social media usage and social anxiety. This suggested that people that frequently make use of social media have a much higher chance of suffering from social anxiety than people that rarely or moderately make use of social media. Finally, findings showed that social anxiety mediates the relationship between social media usage and body dissatisfaction. It indicated that people with high levels of social anxiety are more likely to suffer from body dissatisfaction as a direct result of heavy social media usage.

In the literature review, it was mentioned that Norway has passed legislation that makes it compulsory for influencers to indicate that their pictures have been retouched. This is in a bid to significantly reduce body dissatisfaction and unhealthy beauty standards in Norway. Whether this initiative will be effective in improving body positivity in Norway remains to be seen. However, the researchers think this is a worthwhile idea and recommend that other countries, especially the more socially influential ones do the same thing. This should not be limited to social media but should also be introduced in popular culture like film and music. More realistic and everyday-looking people should be projected on the big screen and in music videos to promote the idea of a more diverse definition of beauty.

This study was limited to university students in Uganda, the decision to focus on university students was because they fall within the age bracket of social media users according to Facebook analytics and other social media data. However, there

is a need to expand this study beyond university students, as a lot of individuals outside the university environment are also ardent users of social media and maybe affected differently. Given this, the researchers are recommending a more holistic study that considers the wider society and other media forms (such as TV) and how they affect the perception of body dissatisfaction among their users.

DATA AVAILABILITY STATEMENT

The original contributions presented in the study are included in the article/supplementary materials, further inquiries can be directed to the corresponding authors.

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ETHICS STATEMENT

The studies involving human participants were reviewed and approved by Kampala International University and Victoria University. The patients/participants provided their written informed consent to participate in this study.

AUTHOR CONTRIBUTIONS

YJ: research design and variables definition, initial data analysis, and finalizing the findings. AA: collecting the data and literature review. GN: data analysis and drafting the findings. All authors worked on the last version of the paper.

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Critical Thinking for Writing Using Facebook Under COVID-19 Lockdown: A Course Model for English Literature Students

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Critical Thinking for Writing Using
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The aim of this paper is to explore the effectiveness of critical thinking for improving the writing skill of undergraduate Arab students who study English Literature at Saudi universities under lockdown circumstances due to the COVID-19 pandemic. At the same time, it explores the impact of implementing Facebook as an online Constructivist tool to improve this skill. A general overview of the status of English language education in Saudi Arabia is briefly presented to shed light on the ongoing English language challenges in learning writing for undergraduate students in the English language and literature departments, which got more manifested due to the current status of education mode with the emergence of the pandemic. Two-group posttest-only randomized experiment was employed to evaluate the effectiveness of the proposed model, using the infusion and constructivism approaches. A total of 40 students enrolled in a literature course at a private university in Saudi Arabia participated in the experiment. The treatment was conducted through utilizing Facebook. The results demonstrated that students' improvement in English writing was due to the combination of the infusion of a set of critical skills and the constructivist teaching and learning mode.

Keywords: English language, writing skill, literature, critical thinking, Facebook, COVID-19 pandemic

INTRODUCTION

Various studies and research have been conducted with exploring challenges facing English language and literature students in Saudi universities. Among the various conclusions, following need a mention: limited time of English language courses, intensive load of curricula, teaching methodologies, lack of the target language environment, lack of adequate up-to-date effective instructions in the classroom, and learners' lack of motivation, to name some (Hammami, 2002; Rababah, 2005; Ansari, 2012; Al Hosni, 2014; Hussein and Elttayef, 2016; Omer, 2018). Hammami (2002) elaborates that the core problem of Arab learners of English lies in the pre-packaged language teaching curricula that are imported for the students but are not based on their needs; these pre-packaged curricula are delivered in a tedious manner that slackens students' improvement. Alrabai (2017) adds that English teachers in Saudi Arabia are always equipped with an identical fixed syllabus with guidelines and deadlines that they are required to apply and follow, and this strongly prescriptive nature of the curriculum likely reinforces

student dependency on the teacher. Omer (2018) sheds light on the psychological factors that hinder students from learning English, such as the fear of making mistakes, anxiety, shyness, lack of confidence, and lack of motivation. These factors result in weaknesses in students' English language level which consequently affects their academic attainment in other courses and their attitude.

Saying this, once COVID-19 has been unanimously considered a global pandemic, the previously mentioned challenges became more complex to cope with due to the closure of universities and a switch over to online education in general and virtual learning in particular. Universities in Saudi Arabia start to use virtual platforms as the main tool for delivering learning content and facilitating communication between education stakeholders, teachers, and students. However, immediate impacts have been witnessed as "the pandemic adds a further degree of complexity to higher education" (Pedro et al., 2020, p. 11), and many prior unresolved issues surface in a more visible manner. In addition, new challenges arise that can be categorized as the following: stakeholders' readiness, mainly teachers, and students to adapt to online teaching, online platforms and resources compatibility, and curriculum modification to provide (at least) same outcomes as in class teaching.

Nevertheless, this pandemic still offered the opportunity to reconsider the status of English language and literature teaching in non-English speaking countries, such as Saudi Arabia and reconsider and redesign the teaching and learning strategies and syllabus, i.e., rethinking about the skills students acquire in their education and whether these skills offer them authentic learning outcomes and sufficiently prepare them for working life. Therefore, this course adjusts new teaching approaches, constructivism, and infusion, to propose a new learning model for English language and literature undergraduate students that aim to enhance their critical thinking, better develop their language skills, and reinforce their learning experience. Besides, it aims to encourage students to be involved and interact using an innovative and interactive studying platform that can enhance and develop new skills to learning content, facilitates constructivist learning, and most importantly individualized monitoring and feedback to ensure that no student is left behind.

Laderman (2020) says that due to the crisis of COVID-19, teachers and students both find themselves compelled to embrace the digital academic experience as the ultimate option for continuing the teaching-learning process. Ekoc (2014) claims that social media would better engage students in the learning process as active learners, team builders, collaborators, and discoverers. According to the report of Jones and Fox (2009), among the various types of social media, Facebook is highly used by students, as 85–99 percent of all students use this platform. This is attributed to the following: Facebook does not require training due to its popularity, so students would not feel frustrated toward preparing and using a new learning mode. Supporting this, several studies (Li and Pitts, 2009; Mazer et al., 2009; Park et al., 2009; Munoz and Towner, 2010; Lewis and Nichols, 2012) have concluded that generally students had positive attitudes toward using Facebook in the classroom claiming that it is very user-friendly platform that

does not require any special skills or settings. Thus, it is considered as a convenient online learning platform for the teachers and students.

In addition, Facebook can develop a constructivist learner centered online learning, intellectual participations, and discussions, and hence can illuminate critical thinking learning experience more constructively, as it has the potential to motivate student inquiry and create a context in which they learn cooperatively and collaboratively, promoting both reflection and critical thinking (Black, 2005).

Thus, implementing Facebook in this study aims at achieving two main objectives (1) to improve English writing skills and (2) to encourage critical thinking in the context of online discussions, as student-to-student interaction create freer discussion and analysis of ideas (Seo, 2007) as students can freely express themselves to their peers in more comfortable zone away from classroom restrictions; As well as it exposes students to other peers with different thoughts and ideas than their own and grants them the chance to respond to these differences; hence, they learn from each other by interacting with and evaluating others' ideas. Besides, the role of the instructor in monitoring facilitating, interpreting, and synthesizing of information and ideas (Wang, 2009) is also essential. For instance, it is mainly the instructor's responsibility to emphasis avoiding any personal bias in these discussions and comments.

Aim of the Study

This study attempts to show that significant changes do not necessarily require a giant reform; small changes would return with great results. By adopting two well-known approaches, the constructivist and infusion approaches for the sake of achieving deeper and life-long learning experience, the current study aims to redesign the teaching instruction by infusing Paul and Elder's critical thinking skills into a literature course in an Arab context, an attempt to use the current curriculum for improving both students' critical thinking and writing using Facebook under COVID-19 lockdown.

Research Questions

The current study attempts to answer the following questions:

1. To what extent can critical thinking improve students' writing?
2. To what extent can Facebook as a learning platform stimulate students' writing constructively?
3. What is students' perception of this critical thinking-infused constructivist course model?

Literature Review

Status of English in Saudi Arabia

English language is taught in Saudi Arabian as a foreign language. It is not widely used nor practiced in everyday life, and the intensity of the English curricula is generally low but varies according to the studying level. Students join universities with low to intermediate level of English, which does not qualify them to study their fields in English, as most of the

university courses are taught in English. To fill this language gap, universities offer foundation courses in English in which students complete five levels of pure English before they start their specializing courses. However, these courses fail to fully bridge this gap due to numerous reasons, the most important of which is the methodology of teaching English. In fact, English is taught theoretically similarly to mathematical formulas, i.e., students memorize new words and grammar rules by heart with no practical use.

Reform in English curriculum, teaching methods, teaching aids, and teaching atmosphere and students' attitudes have been called for several years ago (Gordon, 1980; Al Ahaydib, 1986) but could not find its way till the recent time. In response to the 2030 vision of Saudi Arabia, serious and productive actions start to take place in all fields of education especially English language teaching due to the awareness of Saudi Arabia Government of its reformatory role in developing the country and coping with the dramatic and accelerating changes happening worldwide. Educational leaders and stakeholders have started to work on developing new modern curricula that facilitate progress and have already published a sophisticated range of education outcomes for higher education to level with the requirements of the job market and to prepare well equipped, highly educated generations (Full text of Saudi Arabia's Vision 2030, 2016). Their goals include refining current curricula, implementing technology, and training teachers to use effective teaching methods and best practices, to name just a few. Such reform steps must consider that with the massive spread of information and accelerating advancement of technology, students' academic achievement should not be measured by the amount of information they store in their brains, but the way they deal with it, filter it, make use of it, and connect it with their real-life experiences. The focus in teaching and learning must shift from "what to learn" to "how to learn" in an interactive and engaging manner.

Critical Thinking and Its Importance for Better Learning

Critical thinking is commonly known as sets of skills applicable in all fields of study that lead to better learning. However, it is hard to agree on one unified definition for it in educational programs and courses as each definition has its own core elements and standards, as Halanon (1995) stated "no single definition of critical thinking is widely accepted" (p. 75). Therefore, some definitions can be more appropriate for certain programs or courses than others. For instance, for English literature courses, theories founded by Glaser (1941); Lipman (2003), or Paul and Eldar (2007) may be more adequate, as critical thinking is referred to as a skillful thinking process, in which the skills of language are used as tools to examine and analyze the content. Thus the skills of thinking, reading, and writing critically are intimately interrelated; students are supposed to use clear and accurate language in interpreting learning content, appraising evidence, evaluating arguments, and drawing warranted conclusions that can be tested, a process that enables students to reconstruct their knowledge of English literature by reaching accurate judgments based on wider

experiences (Glaser, 1941). They would also learn how to detect vagueness and ambiguity from clarity and precision within the learning content they study in order to articulate clear, relevant, and significant thoughts and points (Paul and Eldar, 2007).

However, critical thinking is hardly practiced by undergraduate students of English language and literature; and if that happens, it is limited to sets of analysis, evaluation, or reader-response questions which have no criteria to be met. Students' answers are neither organized nor assessed as the students are not trained to answer critical thinking questions, they fail to use clear and accurate language to represent their ideas, and their answers lack common critical thinking standards, such as depth, breadth, and significance. Hence, lecturers or educators usually notice that students forget the learning content soon after the end of the courses and rarely connect the acquired knowledge to other courses. Such obstacles can be attributed to the unavailability of the academic courses in English Language and Literature departments that aim to foster critical thinking.

On these grounds, Paul and Elder (2019) have proposed a model of critical thinking, which consists of a set of reasoning skills that examine the content sensitively, a group of intellectual standards that aims to self-assessing and correcting, and intellectual traits that differentiate to what extent thinkers are capable of being fair-minded and critical. Students cannot engage in better thinking unless they learn how to employ criteria and standards by means of which they can assess their thinking for themselves (Lipman, 2003). Paul and Elder (2019) also assure that the four language skills are interrelated with critical thinking and need to be practiced together. Based on their theory, students can improve their thinking and language skills from spontaneous and superficial levels to deep and long-life learning through persistent practice of critical thinking skills and constant assessment in language.

The Infusion Approach for Teaching Critical Thinking

The infusion approach is based on teaching students critical thinking skills by using content and context in which they can explicitly use these skills (Ennis, 1989). Weinstein (1995) argues that critical thinking should be embedded in other subjects because "whatever the dispositions, skills, and strategies used, they need to be identified, contextualized, and exercised within the regular curriculum if critical thinking is to take a secure place in teaching and learning" (p. 40). Thus, the infusion approach emphasizes the process of acquisition of thinking skills through the context of content learning and instruction and instills critical thinking skills along with the study subjects (Swartz, 1992). Furthermore, applying the infusion approach can be one of the best options in reforming English literature curriculum on the short term as it does not require a complete change of the materials, but to redesign the course instruction keeping critical thinking in mind, and shifting the teaching from teacher-centered to student-centered. These can be simple efforts but can make a big difference.

Paul and Elder's critical theory is infused in the current study in a literature course to foster undergraduate students' critical thinking and improve their writing skill. It is selected

because of its universality and applicability to language and literature courses, as (Paul and Elder, 2019, p. 128) claim that its elements and standards are “present in all reasoning of all subjects in all cultures for all time.” They also add that mastering this theory in one context enables students to apply it in other contexts, whether academic studies or real-life experiences; hence mastering it would also contribute to improving students’ content learning in future courses. Paul and Elder (2019) believe that students have to consistently learn how to write as they write to learn. They define substantive writing as “the ability to identify important ideas and express significant implications of those ideas in clear and precise writing” (p. 10). Paul and Elder’s framework for writing critically, which is built on a set of reasoning elements and of intellectual standards for assessing the elements, requires students to be able to apply one or more of the following five levels: (1) paraphrasing accurately the learning content into their own and identifying the essential meaning of it; (2) explicating the thesis statement of the learning content, by stating, elaborating, exemplifying, and illustrating the thesis of each part or paragraph; (3) analyzing their thinking for assessing it by identifying; (4) evaluating and assessing the text using the intellectual standards: clarity, precision, accuracy, relevance, significance, depth, breadth, logic, and fairness; and finally (5) practicing role-playing the thinking of the author to demonstrate their critical thinking analysis of the text. On this basis, it is crucial for students to understand the intimate relationship between thinking and writing, any significant deficiency in thinking entails a parallel deficiency in writing and vice versa (Paul and Elder, 2019).

Facebook as a Constructivist Tool for Online Learning

Constructivism is a well-researched theory in education which emphasizes that learning should be an active process through which students improve their learning skills and building knowledge within a supportive community (Taylor, 2009). One of the essential criteria of constructivism is the interaction among students during the learning process. Students use their prior knowledge and experiences for constructing new knowledge (Hoover, 1996; Driscoll, 2005) and share their ideas and experiences with their peers (Almala, 2006; Lim and Ismail, 2010; Alhojailan, 2012; LaRue, 2012). The role of educators or teachers shifts from the “sage on the stage [to] the guide on the side” (King, 1993, p. 30). Their role becomes more that of a counselor, consultant, and friendly critic (Brooks and Brooks, 1999); they prepare activities for the learning content, observe students, and provide assistance that keeps the learning process smoothly moving along.

The constructivist Carwille (2007), among others, states that it is crucial to apply the constructivist approach in online teaching because it encourages students to be active and motivated. With the massive advancement in technology, various Learning Management Systems (LMSs) are founded and implemented for educational purposes, whether formal such as Moodle or informal such as social media. As Weller et al. (2005) contend digital learning can contribute to improving the learning process in an innovative manner in which students generate and share subjective

rather than objective experiences and thoughts to construct new knowledge (Von Glasersfeld, 1990). Social media applications, such as Facebook, Instagram, and Twitter, can help in changing the teaching mode from an instructional mode based on lecturing to a collaborative mode, in which students are engaged in discussions and exchange of ideas with their peers in an active and interactive process (Fosnot and Perry, 1996; Goktalay and Ozdilek, 2010). Each student becomes part of a community that works together to improve the learning content (Collins, 2009). Literature is rich with studies and researches that particularly investigate the effectiveness of social media as constructivist teaching tools. Lantz et al. (2013) found that social media can offer a collaborative language-learning space in which students combine learning content and communicative use of language if social media is integrated properly and its purpose clearly understood by students and educators (Kear, 2004).

Several studies have explored the impact of Facebook on education, considering several aspects, such as utilizing it in teaching and learning, stakeholders’ attitudes and perspectives, including teachers, students, and administrators, toward utilizing it for educational purposes and as an educational resource (Kabilan et al., 2010; Aydin, 2012) and the relationship between Facebook utilization and students’ motivation and engagement (Hyland, 2004; Junco, 2012). Furthermore, Facebook features facilitate communication without violating users’ privacy, as these groups do not necessitate their members to be mutual friends. In one study, Alshehri and Lally (2019) investigate university students’ attitude toward using social media in education at a Saudi university. Although the study finds that all the participants were familiar with social media and frequently used various applications and exhibited a positive attitude toward them, it indicates that social media are still not widely implemented in the education field in Saudi Arabia.

Facebook as a Learning Tool During COVID-19 Lockdown

During the COVID-19 pandemic, the abrupt closure of institutions and universities in Saudi Arabia has caused students to have significant challenges continue their academic attainment; hence, an immediate action was needed, that was basically implementing technology in education, developing online learning communities, and improving their capability to be more innovative in using the various applications to involve their students in a significant and accessible online teaching-learning experience, as well as cater their needs.

Social media, such as Facebook, Telegram, WhatsApp, and other has become inevitable for the continuity of education, namely teaching and learning the English language skills (Kerres, 2020; Wang et al., 2020). Selecting one application would be mainly based on how it can be used to facilitate constructive and effective learning, such as planning the lessons, posting the learning materials, and students-students and students-instructor’s interaction, with keeping students’ confidence and independent learning in mind.

Supporting studies of Low and Warawudhi (2016); Faryadi (2017), and Alhumaid et al. (2020), in which they refers to the significance of social media, mainly Facebook, in enhancing

students' English writing skill in an encouraging learning environment, as they found that students can improve their confidence, contentment, motivation, and perceptions about learning English. In addition, they conclude that Facebook can improve English learning and interaction between instructors and students, especially in big classes with variant ability students. Notwithstanding above, Facebook is selected for this study.

MATERIALS AND METHODS

A triangulation mixed methods design was used in the study and it is a type of design in which different but complementary data were collected on the same topic (Creswell et al., 2003). In this study, quantitative instruments were used to test the overall perception of the participants and their critical thinking and language skills improvement. Concurrent with this data collection, qualitative phase included the intervention that is designed and conducted by the researcher, a PhD candidate specializing in infusing critical thinking in English language and literature education, with 8-year experience as an EFL instructor. She successfully completed 40 training hour course: "How to Infuse Critical Thinking into Instruction" with The Foundation of Critical Thinking prior to this study. The reason for collecting both quantitative and qualitative data is to bring together the strengths of both forms of research to compare results and validate results.

Research Instruments

Following are different but complementary tools that were used to answer the research questions, their results are triangulated for more reliable results:

Post-test

The post test is aimed to measure the improvement in students' writing in both groups after completing the course and to see whether the skills of critical thinking impacted the performance of the experimental group. The posttest was assessed in terms of students' language use and critical analysis: The language skills were assessed by meeting three essential criteria: (1) correct essay structure, (2) free of grammar mistakes and use a wide range of relevant terminology, and (3) correct in-text citation and referencing. In addition, a rubric set by Paul was adopted to measure students' reasoning skills in terms of clarity, accuracy, precision, and well exemplification. Students' performance was scored in both the reasoning and language rubrics according to a 10-point scale: 0–2 points for unacceptable (unskilled) writing; 3–4 points for poor (minimally skilled) writing; 5–6 points for mixed level writing (beginning skills); 7–8 points for commendable writing (skilled); and 9–10 points for fully meeting the criterion that is excellent and highly skilled writing (Appendix A). A *t* test is then done to determine if there is a significant difference between the writing level of the control and experimental groups.

Field Notes

Regular, detailed, and precise field notes were taken from both groups during the online teaching and learning to check the effectiveness of the intervention in achieving its purpose. The researcher observed and recorded students' interaction, progress and involvement in each, and consequently to what extent each platform succeeded to stimulate students' writing. The field notes were used to bolster the results of other tools.

Questionnaire

A questionnaire of five sub-sections designed by the researcher aims to answer the third research question by finding out the experimental group students' perception and attitude toward the intervention. A five-point Likert scale was used for 44 items questionnaire in terms of their overall perception of the intervention, their critical thinking and language skills improvement, and their attitude of implementing Facebook for learning and the instructor's constructivist teaching style by indicating whether they *strongly agree*, *agree*, *disagree*, *strongly disagree*, or are *neutral* about the questionnaire items (Appendix B). In order to check the validity of the questionnaire, a group of PhD holders were asked to evaluate the questionnaire items and provide their comments and suggestions and a final draft was written accordingly; then Cronbach alpha was performed in order to check its reliability and the overall reliability ranged from (0.92) to (0.97), which revealed good reliability.

Research Design

An only-posttest two-group randomized experimental design was used in this study. Qualitative and quantitative data were collected for more reliable and validated results. The intervention is designed and conducted by the researcher, a PhD candidate specializing in infusing critical thinking in English language and literature education, with 8-year experience as an EFL instructor. She successfully completed 40 training hour course: "How to Infuse Critical Thinking into Instruction" with *The Foundation of Critical Thinking* prior to this study.

The intervention took place during exceptional circumstances due to COVID-19 lockdown, when teaching the university courses was transferred to the online mode. Out of 16 weeks (one academic semester), all the students had already completed 6 weeks of study on campus, in which they were theoretically introduced to the main themes of the course. Two weeks were allocated for the mid and final exams; however, these exams are not used as tools as they included materials which are not included in this study. Thus, 8 weeks were assigned for online study, in which students had to do critical reading and analysis of two short stories. In this vein, both the experimental and control groups were taught by the same researcher *via* online mode with the former as per the new design of the course, and the latter as per the traditional way of lecturing at the university.

Unlike studies such as DiVall and Kirwin (2012) in which the researchers compared the pros and cons of the formal (Moodle) and informal (social media) online platforms, this

study implemented both modes of teaching for other reasons. Moodle was used for the control group according to the university regulations, similar to other running courses, while the informal mode, namely Facebook, was selected by the researcher due to students' familiarity with it and all its facilities.

Instruction Procedure for the Control Group

The researcher assumed the role of a lecturer with the control group lecturing them as in class using the university LMS. Prior to the lockdown, the first online lecture was devoted to introducing the LMS and how to use it during and after the lectures, as some students were unfamiliar with it. They were guided on how to download the presentations, to contact the lecturer *via* email, and to participate during the lecture; however, the only way of participation available for all the courses was the written chat. As the mode of teaching is lecturing, students do not interrupt lecturers during their presentations. However, unlike class lectures, attendance was not checked as making sure to involve all students was merely impossible.

Instruction Procedure for the Experimental Group

The experimental group resumed the course but with a constructivist teaching style using Facebook. A *Social Learning* group with its features, such as creating units and tracking members, progress for facilitating the teaching process was created and implemented. The learning content was organized in units that match the pacing schedule of the main course: there were three units, the introduction and two others for the learning content. In the first unit, different materials, such as infographics, graphs, and videos, were uploaded to introduce students to the concept of critical thinking in an attractive manner. Two more units were created for the learning content; each unit was allocated 3 weeks of study in order for the experimental group to be on the same pace as the control group.

In the first week on Facebook, the experimental group had a 2-h live meeting with the first hour devoted to introducing the theory and skills of critical thinking and the last hour allocated for discussion. In order to better familiarize the students with the critical thinking skills, they were informed to check the introductory unit on Facebook group and were provided with two short essays to read and think about prior to the meeting. Thus, the second-hour discussion was meant to be a warming up activity in which the instructor explicitly guided students to answer the set of critical thinking questions and encouraged them to share their thoughts.

After the students' attempts to answer each question, the instructor explained the meaning of the keywords that students need to understand in order to answer the questions. For example, in the first question, students had to know that a thesis statement of a text is its key idea; it is essential to identify it in any text they read in order to clearly understand it and connect its meanings to other concepts from prior knowledge and experiences (Paul and Elder, 2019), and so on. By the end of the discussion, the students were provided with the answer-key to the questions, written by an expert in critical thinking, to better understand the procedure of applying the

theory. By the end of the first meeting students were requested to review all the content posted in the introductory unit to reinforce their understanding and to post any questions about any vague points to be clarified and assessed by the instructor.

From the second week on, the students started to have only 1-h live meeting, in which some of them were asked to summarize in their own words what they had read, paraphrase it, and give examples on it from their experiences (Paul and Elder, 2019), while the others had to comment on their summaries and examples by applying the reasoning standards of clarity, accuracy, precision, relevance, depth, breadth, and significance (Paul and Elder, 2019). The second hour was up to the students to complete the above mentioned critical thinking questions posted in the group at their own pace, as these questions were estimated to require approximately 1 h of work.

The students were to interact and collaborate on the Facebook group by posting their answers and assessing their peers' answers using the *reply* and *tag* facilities for commenting, agreeing, disagreeing, and asking for clarification and explanation. In addition to learning the content, students had the chance to receive feedback on their language use and techniques. The researcher monitored students' interaction and progression; she followed up their responses, probed their thoughts, and commented on them and highlighted their language mistakes by providing individualized feedback on each comment. Finally, the researcher made use of *Create Group Event* facility for posting details about the course pacing schedule such as the page count to read each week and the deadline for posting answers; hence, students received regular notifications regarding the course progression.

Participants

Participants in this study are 40 English literature undergraduate students, enrolled in a third-year course at a private university in Saudi Arabia. The participants' level in English is pre- to intermediate as they have completed five courses in general English in the foundation year plus a course in academic writing. They are supposed to be well-equipped to write well-organized and coherent paragraphs and essays. Prior to the experiment, the students were provided with informed consent.

Data Analysis

To answer the first research question students' written assignments were collected by the end of the intervention to be evaluated. A *t* test of students' writing in both groups was done to compare students' writing in the experimental and control groups. As shown in **Table 1**, students' writing performance was analytically assessed in terms of language and reasoning abilities.

RESULTS AND DISCUSSION

Students in the experimental group demonstrated significantly higher performance in the reasoning skills and writing skill:

1. There was a statistically significant difference in reasoning scores between the two groups of students, $t(38) = -8.77$, $p < 0.00$, two-tailed with the intervention group ($M = 7.11$,

TABLE 1 | Independent samples *t*-test comparing students learn CT skills utilizing Facebook (Intervention Group) and Control Group' Improvements of Reasoning and Language Skills.

Variable	Control group			Intervention group			<i>t</i>	<i>p</i>
	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>		
Reasoning	22	4.59	1.05	18	7.11	0.68	-8.77	0.000
Language	22	6.36	1.26	18	7.56	0.92	-3.35	0.000

SD=0.68) scoring higher than control group (*M*=4.59, *SD*=1.05). The magnitude of the differences in the means (mean difference=-2.52, 95% CI: -3.10 to -1.94) was large (eta squared=0.67).

- There was a statistically significant difference in language scores between the two groups of students, *t* (38)=-3.35, *p*<0.00, two-tailed with the intervention group (*M*=7.56, *SD*=0.92) scoring higher than control group (*M*=6.36, *SD*=1.26). The magnitude of the differences in the means (mean difference=-1.19, 95% CI: -1.91 to -0.47) was large (eta squared=0.23).

These significant differences are attributed to the reasoning thinking process that students in the experimental group applied. In fact, the infusion questions assisted students to deeply read the stories and represent their thoughts and comprehension of what they read in a skilled way through recognizing the reasoning elements of purpose, clarifying, questioning, summarizing, and connecting important ideas together. Overall, these students were more able to think deeper and write better, as they demonstrated the acquired ability to analyze the logic of the learning content, its purpose, its main questions, and the information it contains (Paul and Eldar, 2007).

The results support several studies which deal with the interrelation between critical thinking and writing improvement in various contexts (Yang et al., 2013; Harizaj and Hajrulla, 2017; Lu and Xie, 2019). Paul's CT theory enhances students' critical thinking and improves their writing skill and their writing organization in terms of rephrasing sentences, summarizing paragraphs, and identifying thesis statements, such improvements are mainly due to the practiced critical thinking skills (Afshar et al., 2017; Lu and Xie, 2019).

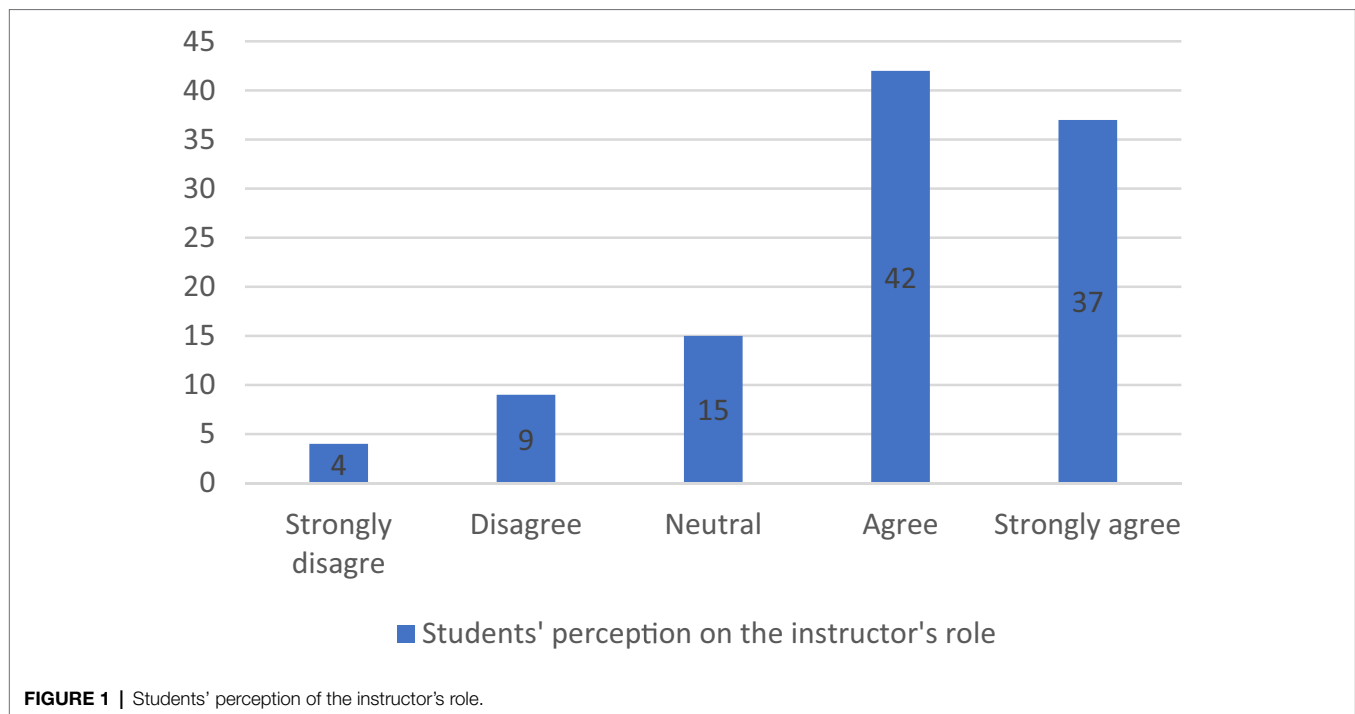
To answer the second research question "To what extent can Facebook as a learning platform stimulate students' writing constructively?" Field notes were taken by the researcher during the 8 weeks intervention. They were mainly concerned with students' interaction and participation on Facebook and compared with the other platforms (LMS) to explore the effectiveness of using Facebook as a constructivist tool for teaching and learning. For the experimental group, the researcher's notes supported the suggestion of Mbat (2013) that critical discussions, whether live chat or posts and comments, proved to be ideal for utilizing constructivism in online education. Posting the set of critical thinking questions in the group encouraged constructivist learning as the students learned through collaboration and interaction with their peers. Their posts and comments indicated their improvement and transformation

from passive to active learners capable of forming their subjective understanding and comprehension of the learning content and of analyzing it based on the critical thinking skills they had received.

The students interacted using Facebook on three levels: interaction with the learning content, with the instructor and with their peers. First, students' interaction with the learning content was done by analyzing the short stories using the infused critical thinking skills. These skills enabled students to be the leaders of their learning; they had to come up with their own analyses and viewpoints. Although they had some critical thinking elements and standards to follow, but still it was their task to reach subjective conclusions. There was no one right answer and all the answers were assessed based on the critical thinking standards. Students' responses to some questionnaire items such as "The course has helped me understand how to read literary works," "I can better develop relevant ideas about the studying topics," and "I can better use supporting information to express my viewpoints" with the majority agreed/strongly agreed showed that the critical thinking skills contributed to creating a thinking map for the students which leads to better learning.

Second, students' interaction with the instructor took on a new turn, i.e., the instructor's role was no longer to lead the learning process, as the case with the control group, but to trigger students' thinking and give them feedback where necessary. Her constructivist teaching role supports the argument of Li (2011), who emphasizes the role of teachers in finding a fruitful space for learning through thinking. Indeed finding such a space for all the students to participate, using Facebook facilities such as commenting and tagging, helped the instructor to determine their levels, their progress in content learning, and their perception of critical thinking in addition to their writing ability. Consequently, she was able to assess each student individually according to their output. Although all the experimental group students were involved in the discussions, the researcher could identify their different levels, abilities, and needs from their comments, and interaction with their peers, and she gave personalized feedback accordingly. This was reflected in the students' attitude toward the teacher, as shown in **Figure 1** below.

Students' interaction with their peers facilitated collaborative and interactive learning. By commenting on their peers' posts to ask for elaboration, agreeing, or disagreeing, giving examples or using other critical thinking standards, the students were able to interact more deeply and significantly. In addition, they acquired new vocabulary and grammar structures from



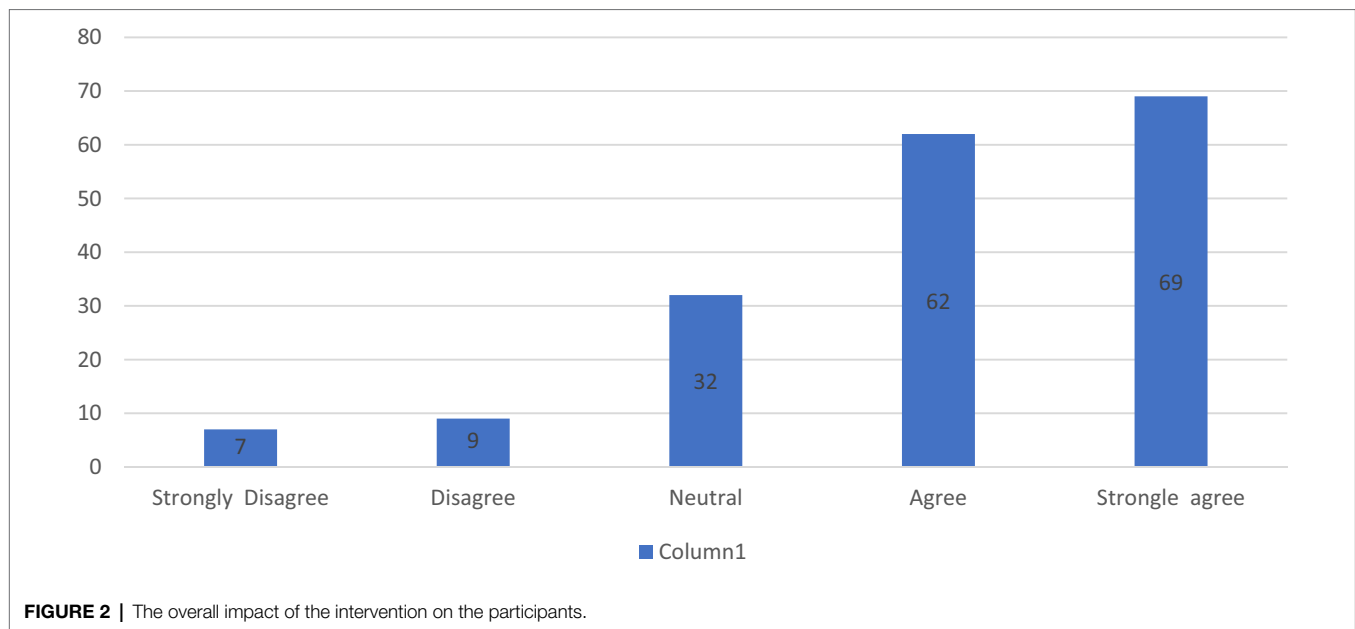
one another. In several posts, the researcher found some students asking their peers about the meaning of some words or suggesting better words to express the same idea. These results support of Alotumi (2015) who investigated the effects of peer feedback on online learning groups and found out that learners became more active and confident, and improved their own writing by reading and commenting on their peer's writing. Like the findings of other studies (Sirivedin et al., 2018; Hasan et al., 2019), the researcher also noticed how students improved their grammar and vocabulary and how they exchanged information and sought advice and clarification as part of their learning process. This informal way of learning significantly helped the students improve their writing skills and their critical thinking skills.

Involving students and making them responsible for their learning created a sense of enjoyment and commitment. For example, receiving notifications for new updates in the group, using emojis and tagging each other created a sense of friendly atmosphere, and relieved the students from the pressure of accomplishing the tasks in a short time. In fact, the majority of the students responded to the following questionnaire items "the course workload was appropriate for the course level" and "the amount of studying hours I needed at home to do required tasks was appropriate" with *agree* and *strongly agree*. No students *disagreed/strongly disagreed* with these statements, but there were a few neutral responses. This result is also articulated in studies of Wu (2016) and Aziz and Khatimah (2019) in which they agreed that utilizing Facebook has various advantages: the participants' enjoyment of the online writing classes, openness, flexibility, accessibility, interactivity, and timeliness.

On the other hand, the researcher noticed that although the students in the control group had the chance to post their questions and inquiries during and after the lectures, their participation was very limited, and almost all of the questions were about the exams and marks. For example, once a student asked "if I memorize your presentations would I guarantee passing the course?" then a flow of questions started pouring regarding the materials they have to study (memorize) and the word count and the marks they would lose if they do not reach it. These questions showed that students were not really involved in the learning process; instead, how to pass the course. This attitude could be attributed to the instructional method of teaching which excluded students from creating knowledge and coming up with their own ideas; their post-test results confirmed their weaknesses in creating substantive pieces of writing, as the traditional curricula do not include the critical writing skills practiced in the intervention.

Further, comparing the longer lectures with less communication and interaction in the control group to the shorter live sessions in which all the students were involved in the experimental group, showed a significant difference between them. That also justifies the significant difference in the writing results, as Mayer and Wittrock (1996) claimed, communication played a vital role in enhancing the learning experience as students shared and exchanged their thoughts and information.

These critical thinking practices allowed students to learn out of the box and integrate their previous experiences and knowledge into the learning content, which is an important criterion for knowledge construction in the constructivist theory.



Supporting the findings of other studies (Sirivedin et al., 2018; Hasan et al., 2019), the researcher's notes revealed how students improved their grammar and vocabulary when learning English informally online as well as how they exchanged information and sought advice and clarification as part of their learning process, which significantly helped improving their writing skills in addition to their critical thinking skills.

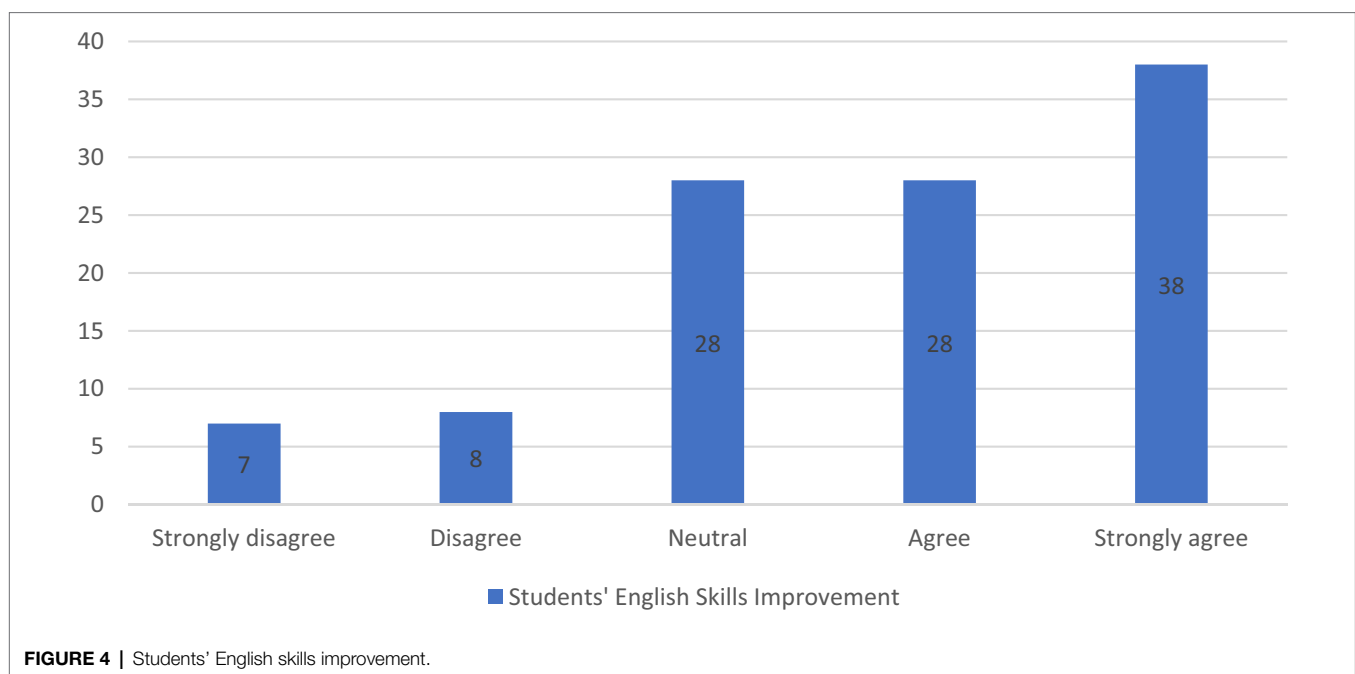
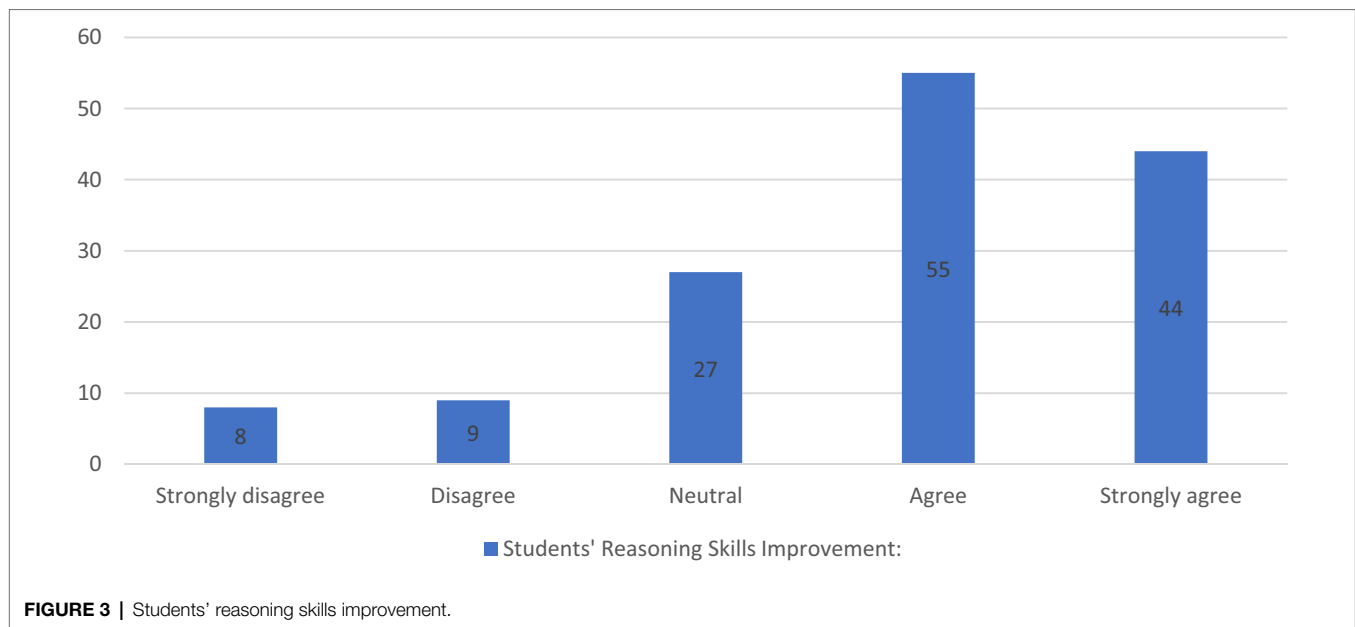
The questionnaire was distributed to the experimental group students to explore their perception of this critical thinking-infused constructivist course model. Students' responses in the questionnaire supported recommendations of Manca and Ranieri (2016) for utilizing Facebook for educational purpose. Facebook is found to contribute to create and develop new different roles for learners and teachers and facilitate applying new methods of communication and collaboration within educational contexts.

For the first section of the questionnaire "The overall impact of the intervention on the participants," only 4%–5% of the students believed that the intervention did not have a positive impact on their learning, 18% percent of the students chose neutral, while 74% ranged between *agree* and *strongly agree*. Therefore, it can be concluded that the majority believed that the intervention introduced them to critical thinking, made them aware of its importance in learning and helped them better study literature courses. Also the workload and time allocated were appropriate (Figure 2).

For the next two sections, "Students' CT skills improvement" and "Students' English skills improvement," as shown in Figures 3, 4 respectively, the majority agreed that the intervention had significant impact on acquiring and improving their skills. About 69% of students *agreed* and *strongly agreed* that the intervention enhanced their critical thinking skills, namely understanding the importance of implementing reasoning skills in English courses to better analyze authors'

arguments and support with significant information and elaboration. In addition, they believed that they learned to differentiate between facts and assumptions, make clearer inferences and develop relevant ideas about the topics under study. As for the second section, 61% believed that their English improved alongside the learning content, as the intervention increased their confidence in using English language to express their thoughts and beliefs orally in live discussions or in a written form on the Facebook group. However, neutral answers in both sections were 19 and 26% and *disagree* responses were 12 and 13%, respectively. These results are most probably due to the time limitations of the study, as less able students needed more time to be able to use the critical thinking skills smoothly and be comfortable with the constructivist mode of learning. Nevertheless, their posttests showed higher grades than their peers in the control group.

For utilizing Facebook as a learning tool, the majority *agreed/strongly agreed* that Facebook facilitated their learning and their critical thinking enhancement and increased their communication and interaction as they cooperated and collaborated with their peers and the instructor, which also increased their motivation and involvement (Figure 5). On the other hand, 74% of the students found that the instructor was successful in redesigning the course for the sake of infusing the critical thinking skills, and she clearly introduced it to them. Also she effectively organized and facilitated the Facebook group and live chat discussions, challenged them to do their best and provided individualized feedback on their writing, an act that helped them recognize their weaknesses and work on them (Figure 1). The responses support findings of Schrader (2015) that the Facebook group contributes to finding a space to build shared meaning and personal connections between the students and their peers, their teacher, and the learning content.



The results of the questionnaire showed that the intervention which was built on the constructivist and infusion approaches for teaching literature is welcomed by students, as their responses were generally positive toward infusing critical thinking in the learning content for a more comprehensive and substantive use of language.

LIMITATIONS

The results of the current study show significant differences between the experimental and control groups, and support results of several studies in the literature. However, the study still suffered from a

few limitations. These include the short period of time, the small sample size, and disregard of students' variables of gender. More studies have to be conducted in order to get more generalizable results.

CONCLUSION

As mentioned earlier, this study did not aim to design a new course for teaching critical thinking but to redesign the teaching instruction through the infusion of a set of critical thinking skills in an English literature course, namely during COVID-19 pandemic, as mostly English language students in Saudi Arabia

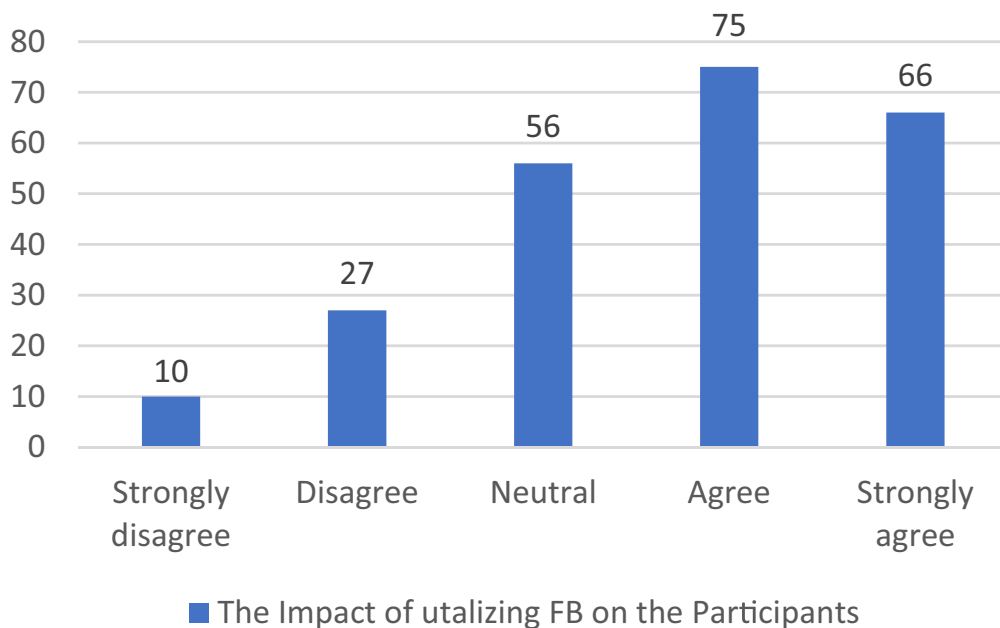


FIGURE 5 | The impact of utilizing literature circles and socratic discussions on the participants.

have been not very successful in improving their writing skills significantly prior the pandemic.

Using social media, namely Facebook, aimed to facilitate constructivist leaning and make the learning context friendly and easy to handle by all students through self, peers', and instructor's assessment. With the upcoming COVID-19 lockdown, educational sectors more than any time before have to put effective and workable alternatives for such exceptional circumstances. As many issues may confront students during their new online learning experience, such as motivation, self-confidence, anxiety, hesitation, and English language abilities; as teaching in class is different from teaching online from various perspectives and using same teaching techniques would merely lead to same outcomes, which were not expected. Believing that there should be well-designed teaching instructions and materials for effective education, this study aims to integrate social media, namely Facebook, as a means to overcome students' hurdles and improve their critical thinking and English language skills during the outbreak, as it supports the claim of Paul and Elder (2001) that the new teaching methods and curricula have to keep critical thinking in mind as the quality of students' thinking today determines the quality of the world they create tomorrow.

Finally, this study aims to draw educators and stakeholders' awareness to their students' obstacles improving their writing and provide a solution to their problems through suggesting a course design that addresses such obstacles and challenges

and offers students a joyful and fruitful learning experience, so that no learners would be left behind in improving the target skills while studying online.

ETHICS STATEMENT

The studies involving human participants were reviewed and approved by Near East University Ethical Committee Board. The patients/participants provided their written informed consent to participate in this study. Written informed consent was obtained from the individual(s) for the publication of any potentially identifiable images or data included in this article.

AUTHOR CONTRIBUTIONS

All authors listed have made a substantial, direct, and intellectual contribution to the work and approved it for publication.

SUPPLEMENTARY MATERIAL

The Supplementary Material for this article can be found online at: <https://www.frontiersin.org/articles/10.3389/fpsyg.2022.903452/full#supplementary-material>

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Effects of Multimedia Assisted Song Integrated Teaching on College Students' English Learning Interests and Learning Outcomes

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In the process of globalization, the English language not only represents British and American culture, but it has also gradually become a language used all over the world, and it has become essential for many people to learn it as a second language. Education is the century business of a nation. At the same time, to meet the needs of E generation, I generation, and touch-screen generation students, teachers are increasingly undertaking multimedia-integrated curriculum design and instruction. Teachers are no longer knowledge providers, but they are expected to provide students with a personalized learning model and guide and support them in a timely manner. This study included a sample of business students from Guilin University of technology. A total of 216 students participated in a 16-week (3h per week, a total of 48h) course of experimental teaching. The research results showed that 1. multimedia assisted, song integrated English teaching affected learning interest, 2. That multimedia assisted, song integrated English teaching affected learning outcomes, and 3. That learning interest had significantly positive effects on learning outcome. Based on these results, this study contributes to improving college students' English listening, speaking, reading, and writing skills via multimedia teaching, which also facilitated their interest and ability to achieve the learning outcomes.

Keywords: multimedia assisted, English teaching, learning interest, enterprise, learning outcome

INTRODUCTION

English is now the predominant common language for global commerce, academic research or conferences, political exchange, and information communication (Meyers et al., 2019). More than 80% of websites in the world use English as the language of communication (D'Amico, 2018), and more than one billion people use English to communicate (Pham and Huynh, 2018). It is a fact that English is the global lingua franca. In the process of globalization, English not only represents British and American culture but has also gradually become a language widely used all over the world, meaning it is unavoidable, and that it is essential for many people to learn it as a second language.

Today's education system works with digitally native students who have grown up in an environment with various digital products. From birth, they have encountered televisions, video games, and the Internet, and have adopted the mindset and information acquisition of older generations, especially the styles of information communication they involve. Having grown up in

this digital nation, they love motion videos, graphic explanations, and the Internet, and constantly use digital products, meaning they worry about battery life and charging. Educators face attention deficits and distractions, which are common problems today. and should actively look for causes and find appropriate teaching models to help them improve their learning styles and attitudes.

Education is the business of the century. To cope with the E generation, I generation, and touch-screen generation students, increasing numbers of teachers have integrated multimedia tools into curriculum design and instruction. In the context of this student-centered instruction, tenacious flexibility is one of the most required qualities in teachers. Teachers are no longer just knowledge providers, they are expected to provide students with a personalized learning model and guide and support them in a timely manner. As students are placed at the center of learning, teachers must become good managers of the learning environment and creative curriculum designers. It is normal for modern people to hold a device in their hands, and instead of banning its use, this strong attraction can be transformed into a learning tool. Disseminated via these digital channels, the pop music industry is popular worldwide. Through multimedia information transfer, students have heard English pop songs or watched music videos. Many songs reflect the spirit of young students, so they can be more easily reconciled.

This study contributes to improving college students' English listening, speaking, reading, and writing skills via multimedia teaching. The students' English learning interests and learning outcomes can be facilitated through multimedia teaching.

LITERATURE REVIEW AND HYPOTHESIS

English songs are integrated into multimedia instruction because English songs are a combination of music and simple language. In addition, they have a sense of rhythm. They have interesting subjects and are rich in meaning. These features are excellent for remedial teaching. Frequent singing can be used as pronunciation practice for children and can cultivate the temperament of language beginners (Pavia et al., 2019). The clear, easy-to-understand, harmonic, and easy-to-sing lyrics are a short rhythmic literary composition (Arigita-García et al., 2021). Integrating English songs into the classroom can fully develop the feeling that music is relaxing and has catchy characteristics that promote learning motivation. Relevant research has indicated that English songs, with their phonology and syllable structure, are appropriate materials for exploring language (Chen, 2018). Hong et al. (2020) mentioned that, unlike traditional English pop song teaching, which simply played music, multimedia assisted popular English teaching is a combination of music and image to promote the learning ability of learners' left and right hemispheres and enable learners to engage in the lyrics and songs. The multimedia assisted songs can successfully attract students' attention, increase learning interest, create a relaxed and pleasant learning environment, and reduce learning anxiety. With repeated listening, the integrated English curricula

can increase the confidence of students as they often can sing English songs regardless of academic achievement levels. Dingyloudi et al. (2019) stated that there are many themes in western pop songs that attract young students, such as the subculture of friendship, loneliness, adventure, love, imagination, fashion, and campus. Appreciating such multimedia assisted songs can better arouse learning interest in consonance. Megreya et al. (2021) pointed out that a large number of contemporary popular slogans in English pop songs used media assistance to support avant-garde images for learning English vocabulary not found in textbooks, but that they mainly served to arouse students' learning interests. Therefore, the following hypothesis is proposed in this study:

H1: Multimedia assisted, song integrated English teaching has an effect on learning interest.

English songs are the best tools for learning English. Music can help improve temperament, express emotions, and effectively relieve learners' fear of a second language. When the mood is good and cheerful, learning will naturally be fun (Ferawaty, 2018). If teachers can create a happy English learning environment and relax tense emotions through favorite English pop songs, both students and teachers will enjoy it. Thus, learning is a double outcome with half the effort and a win-win situation for both teachers and students (Brandmo and Bråten, 2018). Teaching through English songs can help learners understand western music culture and the background of singers and learn the vocabulary, phrases, and grammatical structure of song lyrics. Integrated music teaching can promote learners' English listening, speaking, reading, and writing skills (Hwang et al., 2020).

Hwang et al. (2019) believe that the instructional, entertainment, musical, and cultural functions of multimedia assisted English pop song teaching lead to the appreciation of English pop songs. Multimedia assistance serves to activate otherwise boring teaching and involve English learning in authentic life to improve students' English learning outcomes. Pulasthi and Gunawardhana (2021) mentioned that when listening to multimedia assisted songs, learners were relaxed and happy and awaited the multimedia assisted songs with a curious attitude. In such a learning environment, learners increased their confidence and performance in language learning, because, with musical accompaniment, all learners opened their mouths to sing to promote the learning outcome. Adkins-Jablonsky et al. (2021) indicated that teaching with English pop songs can improve students' English. English pronunciation is different from Chinese pronunciation, and the stress, intonation, accent, and rhythm of English words and sentences often cause difficulties for some learners. Singing English songs enabled students to improve their oral skills and listening comprehension, and the use of multimedia assisted English pop song teaching enabled students to engage in the learning process to promote learning outcomes. Accordingly, this study hypothesizes the following.

H2: The multimedia assisted English pop song integrated teaching has a positive effect on learning outcome.

Learning interest, an important factor in student learning, can affect attention to the subject, goal setting, self-adjustment, use of cognitive strategies, and learning performance. In addition, interest is closely related to willingness, effort, and persistence in selecting homogeneous content for the next learning activity (Munavvar and Fazila, 2018). In practice, teachers discover that learning interest enables students to enjoy learning (Loingsigh and Mozzon-McPherson, 2020). In this respect, students with high learning interest show better self-directed learning compared to students with low learning interest, and they do not easily give up when they encounter difficulties (Jiang and Zhang, 2020). Wang et al. (2018) regarded learning interest as the time and effort students are willing to invest in the tasks. Students with stronger learning interest, higher activity, higher achievement motivation, and a positive attitude toward the completion of tasks can present higher confidence in competing matters. Attitudes toward task completion revealed that students' interest in the task resulted in higher learning outcomes. Psychologists emphasize that it is important to arouse learners' interest in learning materials to improve learning outcomes (Baydas and Cicek, 2019). If teachers succeed in arousing students' learning interest in the learning process and transforming students from passive recipients to active learners, the learning activity has a positive impact on both teachers and learners (Verkijika and De Wet, 2019). Learning interest was closely related to learning outcome; learning interest can facilitate the perception of learning tasks, guide meaningful learning, and provide further motivation to learn (Hollingsworth et al., 2018). Therefore, the following hypothesis is proposed in this study.

H3: Learning interest has a significant positive effect on learning outcomes.

METHODOLOGY

Measurement of Research Variables

Learning Interest

Following Hong et al. (2021), learning interest includes two dimensions.

1. Personal interests: the relatively persistent characteristic of certain matters that cause individuals to continuously engage in the activity.
2. Situational interests: situational interest refers to interests that are triggered by specific matters or conditions in the environment, e.g., movies, or topic content.

Learning Outcome

Following Kang et al. (2019), the dimensions are described as follows.

1. The learning effect: this dimension includes test performance, processing time, and semester performance.
2. The learning gain: this dimension includes learning satisfaction, achievement, and preference.

Research Object and Sampling Data

This study included business students at Guilin University of Technology. A total of 216 students participated in a 16-week

(3 h per week, a total of 48 h) experimental teaching. Data from the questionnaire were analyzed using SPSS. Factor analysis, reliability analysis, regression analysis, and analysis of variance were used to test the hypotheses.

Analysis Method

Analysis of variance was used to discuss the difference between multimedia assisted and song integrated English teaching in terms of learning interest and learning outcome. Similarly, regression analysis was applied to understand the relationship between learning interest and learning outcome.

RESULTS

Reliability and Validity Analysis

As a result of the factor analysis, two factors of learning interest were extracted as "personal interests" (eigenvalue = 3.182, $\alpha = 0.90$) and "situational interests" (eigenvalue = 2.734, $\alpha = 0.88$). The cumulative covariance explained was calculated as 78.473%.

Additionally, two factors were extracted under the construct of learning outcome through factor analysis. These two factors are "learning effect" (eigenvalue = 2.529, $\alpha = 0.91$) and "learning gain" (eigenvalue = 2.241, $\alpha = 0.93$). The cumulative covariance explained was found as 82.366%.

Effects of Multimedia Assisted, and Song Integrated English Teaching on Learning Interest and Learning Outcome

Difference Analysis of Multimedia Assisted, and Song Integrated English Teaching in Learning Interest

The analysis of variance, which discusses the difference between multimedia assisted song integrated English teaching and learning interest was conducted. According to the analysis, significant differences were found between personal interests before and after multimedia assisted song integrated English teaching (Table 1). It was found higher after teaching (4.06) compared to the level before teaching (3.73). Situational interests also revealed significant differences in before and after multimedia assisted song integrated English teaching. The level was found to be higher after teaching (4.11) than before (3.66). In this case, H1 was supported.

Difference Analysis of Multimedia Assisted Song Integrated English Teaching in Terms of Learning Outcome

The analysis of variance, which discusses the difference between multimedia assisted song integrated English teaching in terms of learning outcome was used. According to the results, the learning effect showed a significant difference before and after multimedia assisted song integrated English teaching (Table 2). The effect on learning was higher after teaching (4.17) than before (3.84). Similarly, learning gain was found to be higher after teaching (4.26) compared to before teaching (3.88). Consequently, H2 was supported.

TABLE 1 | Difference analysis of multimedia assisted song integrated English teaching in terms of learning interest.

Variable		F	P	Scheffe post hoc
Multimedia assisted song Integrated English teaching	Personal interests	13.432	0.000*	After teaching (4.06) > before teaching (3.73)
	Situational interests	22.133	0.000*	After teaching (4.11) > before teaching (3.66)

* $p < 0.05$.**TABLE 2 |** Difference analysis of multimedia assisted English song integrated English teaching in learning outcome.

Variable		F	P	Scheffe post hoc
Multimedia assisted song Integrated English teaching	Learning effect	18.442	0.000*	After teaching (4.17) > before teaching (3.84)
	Learning gain	27.592	0.000*	After teaching (4.26) > before teaching (3.88)

* $p < 0.05$.**TABLE 3 |** Analysis of the effect of learning interest on learning outcome.

Dependent variable→ Independent variable↓	Learning outcome			
	Learning effect		Learning gain	
Learning interest	β	P	β	P
Personal interests	2.096**	0.000	2.216**	0.000
Situational interests	2.185**	0.000	2.375**	0.000
F	25.637		32.546	
Significance	0.000***		0.000***	
R ²	0.243		0.307	
adjusted R ²	0.221		0.286	

* $p < 0.05$ and ** $p < 0.01$.

Data source: Self-organized in this study.

Correlation Analysis of Learning Interest and Learning Outcome

Correlation Analysis of Learning Interest and Learning Effect

A correlation analysis was conducted to test H3. The results of the analysis revealed significant effects of personal interests ($\beta = 2.096^{**}$) and situational interests ($\beta = 2.185^{**}$) on the learning effect (Table 3).

Correlation Analysis of Learning Interest and Learning Gain

The correlation analysis conducted on H3 revealed the significant effects of personal interests ($\beta = 2.216^{**}$) and situational interests ($\beta = 2.375^{**}$) on learning gain. Therefore, H3 was supported.

DISCUSSION

In this study, Multimedia-based English teaching promotes interest in English learning and increases learning outcomes.

Teachers should not simply provide a large amount of teaching materials, they should provide systematically plan multimedia teaching content and instructional strategies (Verkijika and De Wet, 2019). Students' prerequisite abilities should also be evaluated and then appropriate multimedia materials should be provided according to their abilities because students without sufficient prior knowledge cannot easily construct solid new knowledge. In this respect, teachers should also consider the integration of other multimedia design strategies when using interactive multimedia materials in the classroom. In multimedia-supported English classes, various multimedia instructions aligned with the course content can be used to promote students' learning interests. Schools provide a method to effectively improve student learning outcomes to more easily achieve instructional objectives and enhance students' international competitiveness. The application of multimedia assisted English song integrated English teaching is learner-centered, and technology-based. Aligning multimedia-assisted English teaching with instructional design enables richer and more diverse instructional methods in learning areas and enhances students' attention, memory, and active learning to effectively promote overall learning outcomes.

Heterogeneous grouping was done according to English proficiency before multimedia assisted song integrated English teaching. Each group contained 4–5 students. In order to test learning outcomes, group evaluation was adopted. The group with the highest score won the game. Besides, the regular order and participation of the groups were also evaluated. Appropriate rewards were used to increase each student's participation and cooperation. After the groups completed the learning process, teachers held singing contests for students in which they prepared a show after classes. The inclusion of props and dance could promote students' English potential. Multimedia assisted song integrated English teaching relies heavily on multimedia equipment available to schools to improve the environment of the e-classroom and enhance the convenience of use, so that teachers and students enjoy using it and teaching

becomes more effective. Moreover, schools can budget for purchasing Bluetooth microphones that students can connect to the Bluetooth in their mobile phones during multimedia assisted song integrated English teaching. Sound effects of a professional microphone can boost students' confidence in singing. Facing the students in E-generation, I-generation, and touch-screen generation, teachers must be prepared to change teaching methods if they require students to change their learning attitudes and methods. Schools can organize workshops on multimedia assisted teaching and invite teachers and scholars with experience of multimedia assisted teaching to demonstrate and share insights, providing teachers with more opportunities for creativity in multimedia assisted English teaching and promoting teachers' interests in and competencies when using multimedia assistance. With constant self-realization and the accumulation of experience, teachers can use multimedia assisted teaching and make teaching more attractive. Moreover, schools can organize activities such as a school English song contest, English choir contest, or I am MV director, encouraging student participation and creating a campus environment with English awareness. Teachers can build personal YouTube channels to teach English and students can subscribe so the channel, meaning English learning is not restricted to the school environment. Teachers can include selected MVs that are for students' learning or they can record instructional videos and open a comments section for feedback, as if they are popular among students they will promote learning interests and learning outcomes.

CONCLUSION

This study shows that multimedia assisted song integrated English teaching promotes students' interest in learning English. Traditional classroom teaching is limited to place,

time, resources, and materials, and teachers might only use blackboards/whiteboards and textbooks for teaching. They also often ignore more learner-centered approaches and do not care about the learning interests of students (Williams et al., 2019).

Based on learners, this study explored the use of popular English songs in multimedia assisted integrated teaching. During the process of multimedia assisted English song playing, the audio-visual stimuli facilitated a relaxed and pleasant mood in students, enabling them to enjoy classes and encouraging them to learn actively and sing popular English songs, and even relax their limbs and sway with the music. Students participated in singing English songs and were deeply touched (Yang and Quadir, 2018).

In terms of learning outcomes, students confirmed that multimedia assisted song integrated English teaching improved their English listening, speaking, reading, and writing skills. English skills and learning outcomes can be promoted by providing complete song lyrics in class, coordinating the schedule of semester tests, and extracting key vocabulary, phrases, and grammatical structures. Students gained comprehensive practice through the use of multimedia assisted song integrated English teaching.

DATA AVAILABILITY STATEMENT

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

AUTHOR CONTRIBUTIONS

Y-ZL performed the initial analyzes and wrote the manuscript. X-YK and Y-YM assisted in the data collection and data analysis. All authors revised and approved the submitted version of the manuscript.

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A Study on the Use of Milieu Teaching to Promote Overseas Marketers' Communication Skills and Confidence in Language Learning

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Language plays an extremely important role for people in terms of engaging in various learning activities. Due to the progress of network technologies, it is an immediate goal for enterprises to take a completely new development direction with the application of network technology. Nevertheless, they encounter many difficulties in carrying out overseas marketing such as localization transformation, jet lag, lack of professional marketers, problems with sellers' product quality, problems with customers' credit checks, international payment problems, and logistics and delivery problems. These problems mainly result from a difference in language families. The current study was conducted as an experimental study with the participation of overseas marketers in Hebei province. Milieu teaching was implemented with an experimental group and traditional teaching was maintained in the control group for a 20-week (3 h per week) experimental procedure. The research results revealed significantly positive effects of (1) milieu teaching on communication skills, (2) milieu teaching on language learning confidence, and (3) communication skills on language learning confidence. Based on the results, it can be stated that the study is expected to help effectively enhance the communication skills and language learning confidence of overseas marketers to achieve the goals of promoting oral expression and language-use skills.

Keywords: milieu teaching, marketers, communication skills, language learning confidence, thinking and behavior

INTRODUCTION

Language is a conventional symbol system and the common rule or custom in society; it represents concepts by combining symbols and structural and semiotic rules. The human growth process is closely related to cognitive learning, perceptual-motor skills, and social interaction with interaction effect (Alu et al., 2018). Language is also an essential skill in life to express feelings, exchange information, communicate emotions, think, and learn (Ziegler and Hadders-Algra, 2020). In general, humans can learn language from birth without being specifically taught. Crying after birth is a form of communication and learning; crying represents needs, and laughter shows satisfaction or happiness. A 1-year-old toddler can say obscure words, and a 4-year-old child can speak complicated sentences like adults do (Rollins et al., 2019). During the process of growth and learning, language and mental abilities develop together, and language becomes the primary

mode of communication that plays an extremely important role in people and in participation in various learning activities. Nevertheless, humans cannot resist the progress of internet technology which continuously presents fast developing products. Therefore, Internet business opportunities are developing positively in the world, so the Internet economic model does not bubble. The application of the Internet is mature, and it is an immediate goal for enterprises to take a completely new development direction with the application of network technology. It is expected that borderless product marketing will be linked by digital transformation so that international trade is not restricted to local time differences. However, there are many difficulties in the conduct of overseas marketing for enterprises such as the transition to a multilingual family, jet lag, lack of professional marketers, production quality of sellers, customers' credit checks, logistics, and delivery problems. Different language family is a factor in such problems.

Sillera et al. (2018) stated that learning should be done in complete situations; if students are provided rich experiences, such development would be in its best condition. Regarding language development, students need to experience the world to grasp the meanings of relationships and learn a language in the context of the environment under the guidance of important caregivers. Julien and Reichle (2018) pointed out that natural context was the key element in early language development; the interference of environmental language could improve students' spontaneous and generalized communication skills. They added that with the application of the milieu teaching approach and strategy, students could acquire functional language in a better manner, and that the acquired language could be extended and maintained to improve language ability effectively. Karal and Wolfe (2018) considered that language teaching in natural contexts was the most suitable for language learning; various ordinary, routine, and trivial activities of daily life facilitated simulation and social interaction. In the process, students can express their personal communication needs to demonstrate more communication behaviors and learn and use language more effectively. For this reason, the effect of milieu teaching on overseas marketers' communication skills and language learning confidence was discussed in this study. The current study is expected to help overseas marketers in terms of improving their communication skills and language learning confidence effectively to achieve the goal of promoting oral expression and language skills.

LITERATURE REVIEW AND HYPOTHESIS

Gauvreau (2019) stated that unlike traditionally controlled situations, instructors in milieu teaching preformulated certain types of skills; milieu teaching focused more on functional communication and emphasized that interference occurs in natural contexts. The major difference from traditional language teaching was that in milieu teaching the lesson was designed to be conducted with discussions rather than memorization of the segment of a skill. In this case, the teaching process was conducted in real-life contexts, addressed the topics that learners

have an interest and highlighted communication skills. Hedger et al. (2020) suggested that teaching should focus on students' motivation and that teaching content should focus on selecting language functionality, practicality, vividness, interactivity, and behavioral reinforcement. Adults interacting with students in natural contexts allowed students to learn new skills and practice skills to receive natural reinforcement of language. Milieu teaching was therefore considered an important strategy to promote the development of students' communication skills. Dawson Squibb and de Vries (2019) emphasized the teaching process in natural contexts and took functional content as the teaching point to improve students' spontaneous and generalized communication behavior and learning. Thus, students could improve their communication skills in natural situations. Therefore, the following hypothesis was proposed in this study.

H1: Milieu teaching has significant positive effects on communication skills.

Rahn et al. (2019) mentioned that the reflection of language and communication in natural contexts can be seen through learning language use in daily routine and activity. Accordingly, communication should take place in a familiar environment for students to gain confidence in language learning. Similarly, language learning in natural contexts represented language generalization. Turner-Brown et al. (2019) pointed out that milieu teaching is a relatively new language teaching approach. In this approach the teachers use positive interaction in the contexts of social interaction and games. They also follow students' guidance, opinions, and requests to expand attention and communication. Overall, milieu teaching emphasizes on students' interests and teachers' prompts to arouse students' interest in topics, which in turn promotes students' confidence in language learning. It is claimed that teaching activities should be conducted in natural contexts and focus on attempts and practice to maintain functional language as well as adopt a teacher–student interaction model. Elek and Page (2019) regarded milieu teaching as the most well-known method for natural language learning in the integrated incidental teaching strategy. The application of incidental teaching is considered the center of the application of milieu teaching. Primary school teachers need to skillfully observe and confirm the timing for teaching. In this case, in order to achieve language learning and communication, it is considered necessary to train in natural environments and respond to students' concerns. In other words, students' language acquisition occurs in the natural environment that reduces pressure on students for purposive learning and effectively promotes language learning confidence. Therefore, the following hypothesis was proposed in this study.

H2: Milieu teaching has significant positive effects on language learning confidence.

The situations should be designed to help students learn the language as well as enable them to communicate in the target language. An increase in communication behavior can naturally promote students' communication skills, and,

along with improvement in communication skills, a decrease in pressure to communicate naturally improves the language learning confidence. Rogers et al. (2019) mentioned that the situation design strategy in milieu teaching refers to the objective of arousing students' willingness to communicate actively. Through situation design, the use of the target language becomes a part of students' daily life and indirectly improves students' communication skills. In this respect, students' interests and activities are required in the process of teaching. Besides, adult and peer models should also be provided. Encouraging and responding to students' progress in communication skills can lead to students improving their confidence in language learning and willingness to communicate. Hancock (2020) mentioned that milieu teaching did not simply teach students to learn a meaningless or unusable language; on the contrary, it provided teaching points to enhance students' functional language skills and promote the use of a communicative language in an interaction, rather than focusing on language content. In addition to sustained confidence in language learning, the improvement in communication skills can also be seen. Apart from teaching language structure, language function and language learning strategy to improve language proficiency, the milieu teaching strategy highlights generalization ability across contexts more. As a result, the following hypothesis was proposed in this study.

H3: Communication skill has significant positive effects on language learning confidence.

METHODOLOGY

Measurement of Research Variable Communication Skills

Following Hwang et al. (2019), the proportion of spontaneous language for active communication and spontaneous language for passive response in the observation period in all oral utterances (including active/passive spontaneous language and active/passive oral errors) is calculated for communication skills.

Language Learning Confidence

Following King et al. (2019), learning confidence contains three dimensions.

Thinking and Behavior

This dimension refers to the willingness to make more effort, overcome difficulties, display a high level of perseverance, choose to display challenging behaviors, believe in personal abilities, face difficulties with confidence, and fully develop one's self.

Experience and Observation

This dimension refers to successfully participating in an activity with full understanding and smooth running, and observing the success and failure experiences of people with the same conditions as one's self.

Others, Body, and Mind

Encouragement from others leads to an individual trying harder and accepting challenging activities, and the effects of

physiological factors and stressful, nervous, or anxious situations on individual performance.

Research Participants and Data

In order to achieve the research objective and test the research hypotheses, the experimental design model was adopted. The experiment was conducted for a 20-week (3 h per week) period. The study was conducted with the participation of overseas marketers in Hebei province. Milieu teaching was implemented with an experimental group, and traditional teaching was maintained in the control group. The data were analyzed with SPSS, and the hypotheses were tested by factor analysis, reliability analysis, regression analysis, and analysis of variance.

Data Analysis

Analysis of variance was conducted to explore the difference between milieu teaching in communication skills and language learning confidence. Additionally, regression analysis was carried out to understand the relationship between communication skills and language learning confidence.

RESULTS

Reliability and Validity Analysis

Factor analysis was conducted in this study, and three factors for language learning confidence were extracted, namely "thinking and behavior" (eigenvalue = 2.763, $\alpha = 0.9$), "experience and observation" (eigenvalue = 2.588, $\alpha = 0.92$), and "others and body and mind" (eigenvalue = 3.162, $\alpha = 0.94$). The cumulative covariance explained was found to be 85.271%.

Effects of Milieu Teaching on Communication Skills and Language Learning Confidence

Analysis of Variance of Milieu Teaching in Communication Skills

In Table 1, the results of the analysis of variance are shown to discuss the difference between the teaching models in terms of communication skills. The results showed a significant difference between the teaching models in active communication in terms of communication skills. Milieu teaching (3.89) revealed higher active communication than traditional teaching (3.42). A significant difference between the teaching models was found in passive response in communication skills. Milieu teaching (4.07) showed a higher passive response than traditional teaching (3.55). Accordingly, H1 was supported.

Analysis of Variance of Milieu Teaching in Language Learning Confidence

The results of the analysis of variance to discuss the difference between teaching models in terms of language learning confidence are shown in Table 2. The results showed a

TABLE 1 | Analysis of variance of milieu teaching in communication skills.

Variable		F	P	Scheffe post hoc
Milieu teaching	Active communication	18.633	0.000*	Milieu teaching (3.89) > traditional teaching (3.42)
	Passive response	24.192	0.000*	Milieu teaching (4.07) > traditional teaching (3.55)

* $P < 0.05$.**TABLE 2** | Analysis of variance of milieu teaching in language learning confidence.

Variable		F	P	Scheffe post hoc
Milieu teaching	Thinking and behavior	20.647	0.000*	Milieu teaching (3.95) > traditional teaching (3.37)
	Experience and observation	27.538	0.000*	Milieu teaching (4.11) > traditional teaching (3.75)
	Others and body and mind	32.392	0.000*	Milieu teaching (4.23) > traditional teaching (3.69)

* $P < 0.05$.**TABLE 3** | Correlation analysis of communication skills and language learning confidence.

Dependent variable →		Language learning confidence					
Independent variable ↓	Thinking and behavior		Experience and observation		Others and body and mind		
	β	P	β	P	β	P	
Communication skills							
Active communication	2.462**	0.000	2.216**	0.000	2.507**	0.000	
Passive response	2.238**	0.000	2.344**	0.000	2.183**	0.000	
F		27.538		34.175		44.625	
Significance		0.000***		0.000***		0.000***	
R ²		0.247		0.322		0.381	
Adjusted R ²		0.235		0.307		0.364	

** $P < 0.01$, *** $P < 0.001$. Data source: self-organized in this study.

significant difference between the teaching models in thinking and behavior in terms of language learning confidence. Accordingly, milieu teaching (3.95) was found as enabling higher thinking and behavior than traditional teaching (3.37). The teaching models showed significant differences in experience and observation in language learning confidence. Milieu teaching (4.11) was found to be higher in terms of experience and observation than traditional teaching (3.75). The teaching models revealed significant differences in others and body and mind in terms of language learning confidence. Milieu teaching (4.23) revealed higher others and body and mind compared to traditional teaching (3.69). As a result, H2 was supported.

Correlation Analysis of Communication Skills and Language Learning Confidence

Correlation Analysis of Communication Skills and Thinking and Behavior

A correlation analysis was conducted to test H3. The analysis results are given in **Table 3** and reveal significantly positive effects of active communication ($\beta = 2.462^{**}$) and passive response ($\beta = 2.238^{**}$) on thinking and behavior.

Correlation Analysis of Communication Skills and Experience and Observation

The analysis results shown in **Table 3** reveal significantly positive effects of active communication ($\beta = 2.216^{**}$) and passive response ($\beta = 2.344^{**}$) on experience and observation.

Correlation Analysis of Communication Skills and Others and Body and Mind

The analysis results shown in **Table 3** reveal significantly positive effects of active communication ($\beta = 2.507^{**}$) and passive response ($\beta = 2.183^{**}$) on others and the body and mind. According to the results, it can be stated that H3 was supported.

DISCUSSION

Changes in environment and design of conditions can increase overseas marketers' communication opportunities and willingness, learning duration and opportunities, and language learning confidence. For this reason, teachers can arrange for "dissatisfied," "interested," "assistance required," "selection required," and "unnatural" styles from time to time to increase the opportunities for overseas marketers to communicate with others. Overseas marketers usually have a weaker ability to learn new languages and poor communication and comprehension skills. In this case, language should be

introduced in each instruction to combine language and action to assist overseas marketers in terms of language learning. Many overseas marketers show weak expression in the new language, with unclear pronunciation, and are not used to the responses. In this case, simulating responses is the key factor. If overseas marketers get used to simulating responses, it can help in the development of communication skills. Weak generalization ability is a common problem for overseas marketers. In this case, presenting physical objects for communication teaching can avoid difficulties in transformation and promote overseas marketers' comprehension for effective learning.

CONCLUSION

The results of the experimental observation in this study confirm and validate the views of previous research by Julien and Reichle (2018), Dawson Squibb and de Vries (2019), Elek and Page (2019), and Rahn et al. (2019). The findings showed that milieu teaching can improve overseas marketers' communication skills and increase sentence length and responses to engage them in situations where they can better interact with others. As mentioned by previous researchers, natural situational teaching focuses more on functional communication than traditional teaching and is more like conducting a conversation. Therefore, the teaching takes place in a natural situation, and in the interaction, it can be more involved in how to better interact with others (Gauvreau, 2019). As a consequence, it is safe to claim that milieu teaching can be used for the communication training of overseas marketing professionals. Communication training or language teaching in natural contexts can directly address situations or matters as teaching content in order to eliminate factors that make transferability and generalization difficult. Overseas marketers usually have a poor understanding of a new language. Language teaching, in changing and complicated situations, might be too complicated and difficult for overseas marketers. As discussed by Rahn et al. (2019), the natural situational intervention of language and communication is based on various daily routines and activities to learn how to use the language. Communication needs to be carried out in a familiar environment so that students can feel confident in language learning. For this reason, natural contexts with normal or routine activities in daily life can provide overseas marketers with repeated practice in the real-life environment and gradually increase spontaneous speech. Since overseas marketers have poor communication and comprehension of a new language, they cannot effectively and appropriately respond in many situations. In this case, instructors' demonstration might easily confuse them. As a result, peers' or teachers' drills and demonstrations with immediate reinforcement and feedback can lead overseas marketers to better understand the meanings and promote

imitation for learning. Consequently, people's assistance can be well utilized for teaching.

RECOMMENDATIONS FOR FUTURE RESEARCH

In addition to communication or language training, natural environment teaching can also be used for other learning activities, such as teaching arithmetic, shopping, and professional skills. Therefore, it is suggested that future research can address different learning activities.

Language learning and communication are extremely complex processes. Children with special needs must acquire language before they can use it. After that, they can show spontaneous communication performance. Therefore, long-term educational intervention can help improve their active and spontaneous communication performance.

The pedagogical intervention in this study was limited to the context of overseas marketers and could not be generalized to other contexts (e.g., home, office, etc.) or objects. Therefore, future research can explore the effects of generalization in different contexts.

DATA AVAILABILITY STATEMENT

The original contributions presented in this study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

ETHICS STATEMENT

The present study was conducted in accordance with the recommendations of the Ethics Committee of the Hebei Finance University, and written informed consent was obtained from all the participants. All the participants were asked to read and approved the ethical consent form before participating in the present study. The participants were also asked to follow the guidelines in the form for the research. The research protocol was approved by the Ethical Committee of the Hebei Finance University.

AUTHOR CONTRIBUTIONS

SJ performed the initial analyses and wrote the manuscript. XZ assisted in data collection and analysis. Both authors revised and approved the submitted version of the manuscript.

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Refugee Children and English Language: Challenges From English Language Teachers' Perspectives

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This study aimed to investigate the challenges refugee children face in learning the English language from teachers' perspectives and the challenges of refugees' English language teachers in Jordan. To achieve this aim, a quantitative approach was implemented using a questionnaire. The findings from this study suggest that refugee teachers' acknowledge that they face challenges teaching refugees in terms of cultural competency, preparation, self-efficacy, and practices they implement, and refugee children face linguistic and psychological challenges in learning English. This study attempted to find out the relationship between teachers' preparation and their cultural competency, self-efficacy, and practices they implement and then the relationship between refugees' psychological needs and linguistic challenges, respectively, and teachers' self-efficacy, cultural competency, and practices. Results revealed several significant relationships between challenges and presented them in a model.

Keywords: refugees, psychological challenges, linguistic challenges, English as a foreign language, constructivism

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INTRODUCTION

Jordan has hosted a high number of refugees since it is a country in the middle of a zone with political conflicts and wars, and it is the most responsive country that hosts refugees among all the neighboring countries. Currently, millions of refugees from different countries live in Jordan. Jordan (UNHCR, 2019) has received refugees from different countries, around 60,000 Iraqis, 14,000 Yemenis, 6,100 Sudanese, and 1,700 from other countries, such as Somalia. Similar to neighboring countries, such as Lebanon and Turkey, Jordan is under immense pressure to intake the waves of refugees. Salehyan and Gleditsch (2006) showed that the high number of refugees increases the challenges in social, economic, and educational aspects in the host country.

Refugees pass through hard circumstances after and before refuge since they were taught by different educational systems and curricula in their homelands, some have different native languages and some used to learn different foreign languages in schools, e.g., some Syrian refugees used to learn the French language instead of English, and all of these stand as challenges for refugees and their teachers to progress in language learning and teaching since constructing new knowledge and developing in language learning rely on endogenous elements, internal schema, previous experiences, and knowledge of learners combined with sociocultural and psychological factors (Cole, 1990).

This study investigates the challenges of teaching English as a foreign language (EFL) to refugees and the challenges of refugees in learning EFL from English teachers' perspectives; accordingly, it

attempts to provide a broader view of the challenges related to EFL and refugees and to enrich the literature by explaining in-depth the relationship between these challenges and present them in a comprehensive model. Practically, it provides authentic information that helps in enhancing the practices used to teach EFL to refugees.

CONSTRUCTIVISM

The theory of constructivism claims that in the language learning process, learners construct new ideas and concepts according to their previous knowledge. Piaget (1980), the father of constructivism, argued that learners take new information and ideas and then shape them upon their understandings, previous knowledge, and experiences. The construction of individuals' new knowledge emerges according to two components; accommodation and assimilation, in assimilation, individuals relate new experiences to old ones, and accommodation means reshaping the new experiences into the mental capacity that already existed. Ginsborg (1990) wrote that new information, thoughts, and concepts can have meaning only when it is related to individuals' knowledge, and this represents schema. Schema theory is "every act of comprehension that involves individual's pre-existed knowledge" (Anderson et al., 1977). For example, readers of such text develop their interpretation through combining information the text provides with the information a reader adds to that text (Widdowson in Grabe, 1988:56). Constructivism can clarify the challenges the refugees face because they build the new knowledge according to the old knowledge which was stored using different curricula, different systems, and sometimes different languages in their home countries.

A REVIEW OF RELATED LITERATURE

Teaching EFL is a common research issue associated with the discipline of applied linguistics. Some previous studies (Kanno and Varghese, 2010; Lertola and Mariotti, 2017; Sujito et al., 2019) have identified some challenges of EFLs in many contexts. Undoubtedly, learning the English language has many benefits, e.g., increasing the effective communication (Lertola and Mariotti, 2017), raising job opportunities (Kanno and Varghese, 2010), and increasing social interaction; hence, refugee children need to learn the English language for self-empowerment; however, recent studies have revealed significant educational difficulties that refugee children face (Palaiologou, 2007); one of these difficulties is learning English as a foreign language (Hulstijn, 2011; Gizatullina and Sibgatullina, 2018). Refugees require extra time and effort learning a foreign language according to many reasons, such as dealing with new teachers and interacting with new classmates (AlHariri, 2018), attending new schools (Popov and Stureson, 2015), having linguistic issues as the unfamiliarity with the language (Riggs et al., 2012), and being in a new society (Burgoyne and Hull, 2007). Similar to Lee (2016), refugees face sociocultural challenges

because they come from various backgrounds which in turn restrict them from acculturation with individuals in the target context and, accordingly, they are not confidently interacting with their colleagues in the classes. Other reasons stand, e.g., age variation in language classes, that the refugee students hold different age categories which creates extra challenges for their teachers and challenges in classmates interaction. A number of researchers (Casimiro et al., 2007; Riggs et al., 2012; Watkins et al., 2012) argued that when refugee students move to an overall new context, new scholastic environment, and start dealing with new teachers and new colleagues, this unsurprisingly creates many challenges, especially for foreign language learners. Ashton (1985) claimed that teachers' self-efficacy affects refugee children's academic success. In addition, Stevenson and Willott (2007) stated that the level of the family, homeland, and cultural and social background of refugees may stand as an obstruction in front of learning a foreign language. Olliff and Couch (2005) and Casimiro et al. (2007) argued that refugee language learners who did not experience official education in formal schools need more time and effort to be accustomed to learn a language. A study in Jordan by Alefsha and Al-Jamal (2019) found that refugees' challenges in learning EFL are associated with poor educational background, discomfort with English, and lack of knowledge of teachers to deal with refugees. Conversely, research conducted by Riggs et al. (2012) concluded that refugees learn foreign languages better than peers due to two main reasons, namely, the first is to survive in the target country they live in, and the second is to get better job opportunities.

MATERIALS AND METHODS

Data Collection Tool

An adapted questionnaire by Kurbegovic (2016) was employed to address teachers' perceptions and challenges concerning teaching English to refugees, and some elements of the questionnaire were changed to meet the aim of the study.

The questionnaire was distributed online using Google forms, it consists of 6 categories (i.e., teachers' self-efficacy, teachers' practices, teachers' cultural competency, teachers' preparation, their refugees' psychological needs, and refugee students' linguistic challenges), and each article in each category has four alternative options (i.e., not at all, slightly agree, moderately agree, and greatly agree). The participants were not able to move to the questionnaire without confirming that they agree to participate in the study voluntarily.

The Sample of the Study

The target population in the context of the study is large and it could not be covered by the researchers; still, a relatively small sample of the target population is satisfactory (Nworgu, 1991:69). Hence, the process of this research was applied to the accessible part of the population. The participants were 112 English language teachers who experience teaching English to refugee children in Jordan. The total number of responses to the questionnaire was 134, 22 responses were eliminated, and the selected responses stood at 112 ones.

Validity and Reliability of the Instrument

The collected data were analyzed using SPSS25; the findings showed that the loadings of all the items related to students' psychological needs, teachers' self-efficacy, implementing practices, teachers' cultural competencies, teachers' preparation, and students' linguistic challenges were more than 0.5 value; and the *p*-values were found to be statistically significant at less than 1% confidence level. This, according to some studies (Kock and Lynn, 2012; Adetola et al., 2021), is an indication that the measurement instrument used for the constructs demonstrates a good "convergent validity." Furthermore, the "Cronbach's alpha" and "composite reliability" coefficients for students' needs (0.909 and 0.9304), students' linguistic challenges (0.799 and 0.859), teachers' preparation (0.847 and 0.894), teachers' self-efficacy (0.919 and 0.936), implementing practices (0.933 and 0.946), and teachers' cultural competency (0.774 and 0.843), respectively, were both higher than the conservative value of 0.7 (Kock, 2014, 2015), and this indicates that the measurement instrument has good reliability. The "average variance extracted" of students' needs (0.690), students' linguistic challenges (0.514), teachers' preparation (0.636), teachers' self-efficacy (0.675), implementing practices (0.715), and teachers' cultural competency (0.50) are all greater than the threshold value of 0.5 (Kock, 2015; Adetola et al., 2021), which is an indication of an acceptable internal consistency. Finally, the associated "full collinearity variance inflation" (FVIF) with students' needs (1.581), students' linguistic challenges (1.404), teachers' preparation (1.252), teachers' self-efficacy (1.720), implementing practices (1.503), and teachers' cultural competency (1.397) are all below the recommended threshold of less than (3.3).

RESULTS AND DISCUSSION

English Language Teachers' Preparation

Preparing and supporting teachers can equip them with the skills and knowledge to meet the needs of different students. Teachers need to take on action for career progress in the new merging situations, e.g., dealing with the waves of refugees in the classroom. In this study, 53% of English teachers do not agree on receiving sufficient in-service or preservice professional training on how best to support refugees in the classroom, or taking dedicated coursework in culturally responsive practices for refugees from diverse cultural backgrounds. Wasonga (2005) mentioned that teachers' professional training supports them to feel prepared to meet the needs of their diverse students. De Jong and Harper (2005) recommended a special training for teachers of refugees and they stated that training for specific purposes for teachers, e.g., (refugee teaching) influences their efficacy.

Self-Efficacy

Bandura (1986) defined self-efficacy as one's capabilities to organize and achieve actions effectively. Teachers' self-efficacy has been investigated in different areas, such as in math and science teaching (Tschannen-Moran and Hoy, 1998, p. 202). However, Klassen and Chiu (2011) claimed that research on teachers' self-efficacy (TSE) in the contexts of foreign language

teaching is still underrepresented within the literature. A high percentage (46%) of English teachers who participated in the study feel convinced that they can successfully teach English to refugee students which illustrates that they feel efficient in teaching English to refugees and this does not necessarily mean that they do not face any challenges, they also convinced that it is hard enough to exert a positive influence on both the personal and academic development of refugee students (Peeler and Jane, 2005), and they face difficulties maintaining a positive relationship with refugees during tensions.

Cultural Competency

There is a huge increase in minority of students in schools due to the high number of refugees in host countries which made classes more diverse ethnically, culturally, and in terms of language and dialects. Many studies indicated that effective culturally responsive instruction, high-quality multicultural instruction, refugee students' progress monitoring, and one-on-one learners' support are critical for teaching diverse classes (Irvine, 2003; McIntyre, 2010). Being culturally illiterate can create serious threats to refugees' academic progress. A high percentage (47.8%) of teachers greatly agreed that they are aware of the diversity in the classrooms due to the presence of refugees and they face challenges adapting methods to meet the culturally diverse students, and this instills high responsibility for teachers. Teachers agreed that they have not received enough training to meet culturally diverse students' needs and this complies with a study by Goodwin (2002) who confirmed that teachers in different contexts experience many challenges while trying to meet the needs of culturally diverse students due to the typical preparation they receive from undergraduate degrees. According to McIntyre et al. (2010), language teacher education programs have to equip teachers of English to deliver instruction to various learners and prepare them to use methods that help refugees to achieve the literacy needed to progress in their education.

Teachers' Practices

Teachers play significant roles in providing quality education to refugee students. In this study, 60% of the participants agreed to have the willingness to implement new practices, such as cooperation with refugees' families (Kirk and Winthrop, 2007) and cooperation between teachers and refugees' families, which help refugees to restore a sense of stability and confidence. According to the analysis of teachers' responses, they agreed on facing challenges with the practices they need to implement with refugees who suffer from mental and psychological problems. English teachers are not able to implement practices that meet refugee students' needs, such as conducting or reading studies, trying new types of practices for refugee students by following a treatment manual, and using new and different types of practices developed by researchers. Although teachers can support refugees in the recovery phase in post-conflict emergencies, and with their practices they can promote security, safety, peace, and human rights upon return to home countries (Mononye, 2012), still this needs training. Crisp et al. (2001) argued that training teachers on implementing practices that help in meeting the diversity in the classroom can be challenging.

Refugees' Linguistic Challenges

Schools in Arab world countries teach different foreign languages, e.g., English is used as a foreign language in Jordan and Egypt, and French is used as a foreign language in Lebanon, Syria (some schools), and Morocco. Hence, some refugees learn French as a foreign language and after refuge, it becomes English, which created an obstacle to perform well academically (Riggs et al., 2012), and some of the refugees come with different foreign languages and they face linguistic challenges because of the unfamiliarity of the language taught in the new context; hence, English teachers recommend separation rather than inclusion. Moreover, the presence of refugees with different native languages poses a challenge for teachers and refugees. According to Cohen (2011), refugee students cannot communicate with their teachers due to the language barrier. The majority (60%) of the teachers greatly agreed that they suffer from refugees due to the lack of sufficient English proficiency which prevents refugees from meeting the basic academic requirements of school success. According to Fares et al. (2017), Syrian refugees suffer from learning a new language due to many reasons, such as curricula differences and sociocultural factors. They greatly agreed that teaching languages (English) is constructive (Piaget, 1980).

Refugees' Psychological Needs

Refugees' psychological challenges have been investigated from teachers' perspective, the results showed that the majority around 71% greatly agreed that refugees have unique emotional needs and seem more anxious or nervous compared to other students, and this affects their performance in language learning. Refugees show greater needs for emotional and behavioral support than peers (Forness et al., 2012), and this can be clarified by Krashen (1985) that the psychological status represented in anxiety and negative emotions prevents language acquisition or learning to occur effectively. He explained how psychological factors affect the foreign language learning process (Effective Filter Hypothesis).

Researchers found that refugees during wars experience traumatic events, and each experiences 7 and 15 traumatic events (Mollica et al., 1999). It is expected that this leaves a negative impact on the refugees, e.g., traumatic events lead to depression of 16% (Turner et al., 2003). In cognitive psychology studies, it has been found that traumatic experiences shift neural paths in the human brain and it affects the learning process. Individuals' brain is designed to feel, receive, and store dangerous incidents; hence, all parts of the brain and body are involved in a "fight or flight response," to enable individuals to respond to threatening situations. The traumatic events individuals pass through indeed impact the brain deeply and critically (Perry, 2006). The ability of processing information in individuals with post trauma stress disorder (PTSD) interferes with schema response, and the brain responds to the trigger with a pervasive terror response and initiates the fear response as if they were occurring for the first time. For learning new aspects of language, the brain needs to process, store, retrieve, and respond as it needs to be in a calm and attentive state. However, this flashback, or retriggering

of fright response, places individuals' brains in an extremely over-alert mode. This in turn prevents the progress of language learning process and offers promising relations for studies with traumatized language learners. According to Krashen (1985), anxiety and self-confidence are significant in second or foreign language acquisition; when self-confidence is low, it combines with debilitating anxiety and raises the learners' affective filter, and then creates a block that declines comprehensible input to reach the language acquisition device.

Model of Teacher-Refugee Relationship

To create this model, 5 hypotheses were tested, namely, H1: teachers' preparation directly influences the practices they implement, H2: teachers' preparation directly influences their self-efficacy, H3: teachers' preparation directly influences their cultural competency, H4: practices that teachers implement influence (a) refugee students' psychological needs and (b) refugee students' linguistic challenges, H5: teachers' self-efficacy influences (a) refugee students' psychological needs and (b) refugee students' linguistic challenges, and H6: teachers' cultural competency influences (a) refugee students' psychological needs and (b) refugee students' linguistic challenges. To establish a relationship between these elements and represent them in a comprehensible model, IBM's SPSS statistical tool has been employed to analyze the demographic characteristics of the respondents.

As the assessment of the measurement instrument reliability was examined, the discriminant validity of the constructs was measured as well (Table 1). The findings show conformity with the proposition in the literature that the "square root of average variance extracted shown in diagonal of each construct must be greater than the correlations between that construct and other constructs" (Fornell and Larcker, 1981). The result indicates that the students' needs, students' linguistic challenges, teachers' preparation, teachers' self-efficacy, implementing practices, and teachers' cultural competency display good discriminant validity in the model context.

Common Bias Method (CMB)

In respect to the "common method bias" (CMB), it was demonstrated in Kock's (2015) study that the coefficients of "full collinearity VIF" are sensitive to "pathological common

TABLE 1 | Correlations among 1 vs. with square root of AVEs.

	SN	LC	P	SE	IP	CC
SN	0.831					
LC	0.461	0.717				
P	-0.229	-0.214	0.797			
SE	-0.140	-0.323	0.391	0.822		
IP	0.001	-0.211	0.309	0.542	0.845	
CC	0.381	0.078	0.065	0.296	0.296	0.696

SN, students' need; LC, students' linguistic challenges; P, teachers' preparation; SE, teachers' self-efficacy; IP, implementing practices; CC, teachers' cultural competency. Square roots of average variances extracted (AVEs) shown on diagonal. The numbers in bold indicate discriminant values.

TABLE 2 | Q-squared coefficients.

SN	LC	SE	IP	CC
0.288	0.229	0.160	0.123	0.049

SN, students' need; LC, students' linguistic challenges; SE, teachers' self-efficacy; IP, implementing practices; CC, teachers' cultural competency.

variations" across the constructs in methodological contexts that are the same with the one found in this study. Accordingly, it implies that the sensitivity enables CMB to be identified in a model which nevertheless passes the assessment of convergent and discriminant validity criteria based on a "confirmatory factor analysis" (CFA), as we have in this study. Some researchers suggested the value of 5 to be acceptable and < 3.3 to be the best for full collinearity VIF coefficients (Kock and Lynn, 2012; Kock, 2015; Adetola et al., 2021; Moguluwa et al., 2021). Thus, with the full VIF, none of the full VIF coefficients is greater than the acceptable threshold (≤ 5). Moreover, the "Stone-Geisser" (Q^2) coefficients developed by Geisser (1974) and Stone (1974) are utilized for the assessment of predictive validity (Kock, 2015). This coefficient is only available for endogenous latent variables; that is those latent variables have arrows pointing at them. Kock (2015) suggested that a Q^2 coefficient that is > 0 indicates the acceptable predictive validity of the measurement model, and the results are presented in **Table 2** and it shows that our model meets this criterion.

Hypothesis Testing

For the structural model's quality, the model fit indices were tested and then reported in **Table 3**. All the indices were either statistically significant or inconsistent with the respective thresholds, indicating that the quality of the structural model is adequate (Hair et al., 2010; Kock, 2020).

Confirming the fitness of the model, the significance of the linear and non-linear relationships among the constructs was tested, and the R squared (R^2) value as presented in **Table 4** and **Figure 1** in reference to Hair et al. (2019) indicates a moderate degree of variance explained in teachers' self-efficacy ($R^2 = 0.16$), implementing practices ($R^2 = 0.12$), and low degree of variance explained in teachers' cultural competency ($R^2 = 0.05$) by teachers preparation. In addition, the result further shows that teachers' self-efficacy, implementing practices, and teachers' cultural competency contribute about 27 and 22% of explanation variation in students' needs and students' linguistic challenges, respectively.

In accordance with the argument of Henseler et al. (2016) that the weight of the path coefficient should be examined through the evaluation of effect size (f^2); **Table 5** shows that teachers' self-efficacy (0.058) and implementing practices (0.004) have a weak effect on students' needs, while teachers' cultural competency (0.213) has a strong effect on students' needs which are following the recommendation of Cohen (1977). Similarly, self-efficacy (0.121), implementing practice (0.037), and teachers' cultural competency (0.061) show a moderate, weak, and weak effect on student needs, respectively. In addition, the effect size as presented in **Table 5** reveals that teachers'

TABLE 3 | Model fit and quality indices.

Indices	Coefficient	Decision
Average path coefficient (APC)	0.286	$P < 0.001$
Average R-squared (ARS)	0.163	$P = 0.018$
Average block VIF (AVIF)	1.154	Acceptable if ≤ 5 , ideally ≤ 3.3
Average full collinearity VIF (AFVIF)	1.476	Acceptable if ≤ 5 , ideally ≤ 3.3
Tenenhaus GOF (GOF)	0.318	Small ≥ 0.1 , medium ≥ 0.25 , large ≥ 0.36
R-squared contribution ration (RSCR)	1.000	Acceptable if ≥ 0.9 , ideally = 1
Standardized root mean squared residual (SRMR)	0.070	Acceptable if ≤ 0.1

TABLE 4 | R-squared coefficient.

SN	LC	SE	IP	CC
0.275	0.219	0.158	0.120	0.045

SN, students' need; LC, students' linguistic challenges; SE, teachers' self-efficacy; IP, implementing practices; CC, teachers' cultural competency.

preparation exerts a moderate effect on teachers' self-efficacy and implementing practices while exerting a weak effect of teachers' cultural competency.

The results of the model testing reveal the coefficients of the interaction of teachers' preparation with teachers' self-efficacy "H1" ($\beta = 0.397$, $p < 0.001$), implementing practices "H2" ($\beta = 0.346$, $p < 0.001$), and teachers' cultural competency "H3" ($\beta = 0.212$, $p = 0.009$) to be positive and significant at 1% significance level, respectively. Therefore, hypotheses 1–3 were supported and concluded that teachers' preparation has a significant influence on teachers' self-efficacy, implementing practices, and teachers' cultural competency. Moreover, the hypothesized direct relationship between teachers' self-efficacy and students' needs "H4a" ($\beta = 0.298$, $p < 0.001$) and between teachers' self-efficacy and students' linguistic challenges "H4b" ($\beta = 0.331$, $p < 0.001$) revealed to be positive and significant. This result indicated the significant impact of teachers' self-efficacy on students' needs and their linguistic challenges; hence, H4a and H4b were supported. The result of the estimating direct influence of implementing practices on students' needs "H5a" ($\beta = 0.092$, $p = 0.160$) was found to be positive but not significant, while the coefficient of direct influence of implementing practices on students' linguistic challenges "H5b" ($\beta = 0.137$, $p = 0.047$) as presented in **Table 6** was found to be positive and significant. Thus, H5a was not supported, while H5b was supported; hence, we concluded that implementing practices directly influence the

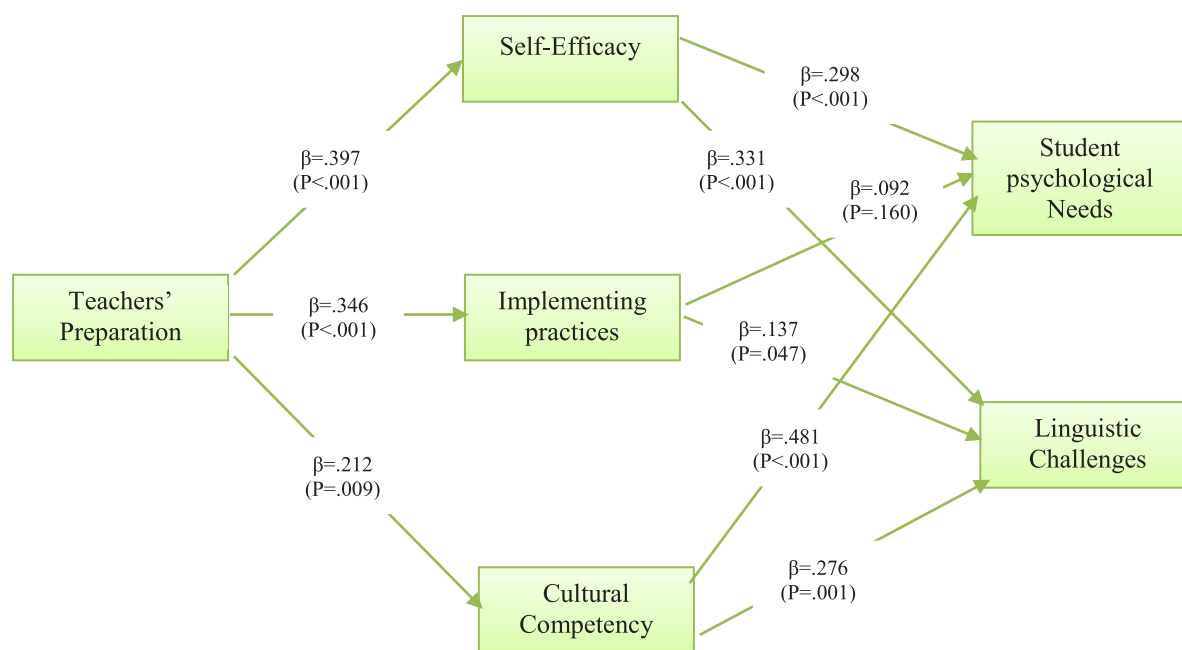


FIGURE 1 | Model testing results.

TABLE 5 | Effect size (f^2).

Interaction	f^2
SE → SN	0.058
IP → SN	0.004
CC → SN	0.213
SE → LC	0.121
IP → LC	0.037
CC → LC	0.061
P → SE	0.158
P → IP	0.120
P → CC	0.045

SN, students' need; LC, students' linguistic challenges; P, teachers' preparation; SE, teachers' self-efficacy; IP, implementing practices; CC, teachers' cultural competency.

TABLE 6 | Path coefficients and P values.

Hypothesis	Interaction	Path coefficient (β)	P-value	Decision
H1	P → SE	0.397***	<0.001	Supported
H2	P → IP	0.346***	<0.001	Supported
H3	P → CC	0.212***	0.009	Supported
H4a	SE → SN	-0.298***	<0.001	Supported
H4b	SE → LC	-0.331***	<0.001	Supported
H5a	IP → SN	0.092	0.160	Not supported
H5b	IP → LC	-0.137**	0.047	Supported
H6a	CC → SN	0.481***	<0.001	Supported
H6b	CC → LC	0.276***	0.001	Supported

SN, students' need; LC, students' linguistic challenges; P, teachers' preparation; SE, teachers' self-efficacy; IP, implementing practices; CC, teacher' cultural competency. Values with * are significant at 10% level, values with ** are significant at 5% level, and values with *** are significant at 1% level.

students' linguistics challenge at less than 5% significance level. As for the direct influence of teachers' cultural competency on both students' needs "H6a" ($\beta = 0.481$, $p < 0.001$) and students' linguistic challenges "H6b" ($\beta = 0.276$, $p = 0.001$), the results as presented in **Table 6** revealed that teachers' cultural competency exerts a positive influence on both students' needs and their linguistic challenges. Therefore, H6a and H6b were supported.

The questionnaire data revealed significant correlations between teachers' preparation and self-efficacy, teacher preparation and their practices, teacher preparation, and cultural competency. The results illustrated the importance of teacher preparation on teachers' self-efficacy (Carr, 2013), practices (Cook et al., 2015) and cultural competency (Landa and Stephens, 2017). In addition, the data revealed significant correlations between self-efficacy and students' psychological

needs (Chwastek et al., 2021) and linguistic challenges (Alefesha and Al-Jamal, 2019), and between teachers' practices and students' psychological needs and linguistic challenges. Cultural competency with refugees' psychological needs showed to be significant, and teachers' cultural competency helps in meeting diverse students' needs (Peeler and Jane, 2005; Lesaux and Geva, 2006). However, the correlation between teachers' practices and students' needs was not significant. As shown in the model, teachers' self-efficacy, practices, and cultural competency mediate the relationship between teachers' preparation and the linguistic challenges and psychological needs of refugee students. Hence, teacher preparation plays an important role in meeting refugee learners' needs and challenges by preparing teachers adequately and effectively in terms of cultural competency, self-efficacy, and teachers' practices.

CONCLUSION

Despite the variation among refugee students, they share common challenges and experiences since they came from war-affected backgrounds. This study showed challenges associated with refugee learners of English and their teachers in Jordan, and attempted to find out the relationship between these challenges and present them in a model. The model showed that English teacher preparation influences teachers' self-efficacy, cultural competency, and the practices teacher implement, and they influence refugees' linguistic challenges and psychological needs. For example, according to the proposed model, if teachers had challenges with preparation, they would face challenges with the cultural competency and then this creates challenges in meeting refugees' needs. The limitations of this study are associated with the phase of collecting data during the COVID-19 pandemic period. Future studies are likely to collect data from refugees qualitatively.

DATA AVAILABILITY STATEMENT

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

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ETHICS STATEMENT

The studies involving human participants were reviewed and approved by the Eastern Mediterranean University Ethics Committee. The patients/participants provided their written informed consent to participate in this study.

AUTHOR CONTRIBUTIONS

HA did the data collection, data analysis, wrote the introduction, methodology, and finally the discussion part of the manuscript. NK carried out the supervision of the manuscript. Both authors contributed to the article and approved the submitted version.

SUPPLEMENTARY MATERIAL

The Supplementary Material for this article can be found online at: <https://www.frontiersin.org/articles/10.3389/fpsyg.2022.918734/full#supplementary-material>

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Challenges of Writing Theses and Dissertations in an EFL Context: Genre and Move Analysis of Abstracts Written by Turkish M.A. and Ph.D. Students

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Writing a thesis or dissertation is a challenging procedure as it is one of the requirements of getting a graduate and postgraduate diploma. Writing an abstract like other parts of a thesis or dissertation has its criterion. For this reason, due to globalism, those abstracts written by non-native English speakers may lack some of the features of the abstract genre and move that must be included. This study examines the moves of M.A. and Ph.D. abstracts written by Turkish students between the 2009 and 2019 academic years on foreign language education at Cyprus International University. The data consisted of 50 abstracts chosen randomly from the ELT department. For the analysis, Hyland's five-move model has been used. The study results reveal that 40 abstracts did not follow the five moves that Hyland has put forward. Moreover, it can be stated that the absence of some moves in the abstracts may cause restraint for readers to comprehend these studies in terms of communicative purposes.

Keywords: genre, move, abstracts, ELT M.A. thesis, ELT Ph.D. thesis, Hyland model

INTRODUCTION

In recent years, there has been an increase in the number of students willing to get a diploma in their postgraduate fields. Thus, it became necessary to conduct research on the written abstracts as they are considered the essential section of the written theses that will give the reader an idea of the value of the whole dissertation. Hence, to draw attention to its importance and highlight the features that must be included in them, abstract analysis becomes more significant at this point. Especially for those writing their M.A. or Ph.D. abstracts, to guide them on what is needed. Any abstract that is going to be written needs systematic and organized work. The absence of these may lead to comprehension problems and may cause less attention. Poorly written abstracts can have unwanted results and may not receive enough credit or be read. To avoid this, what is expected is that a writer should have all the necessary skills to write good abstracts, which should be seen or understood from the moment one looks at the study. Genres and moves should be included and defined so that every reader understands each step clearly without reading the whole research. Genre is a literary term, and genre analysis is a sort of discourse done to check the reliability of communicative purposes. So, it includes an analysis of the style and text. Abstracts as genres have become a key tool for investigators because they offer them a chance to choose the appropriate

study for their investigation (Chen and Su, 2011; Yelland, 2011; Piqué-Noguera, 2012; Paré, 2017; Abdollahpour and Gholami, 2019; Anderson et al., 2021; Yu, 2021).

Moreover, genre referring to abstracts means socially known ways of using language. This is because writing practise is done to give the reader a chance to interpret what the reader could be expected based on what they have read in earlier texts (Hyland, 2007). As Kaya and Yağız (2020) state, publishing research articles in English is the main aspect of academic life. Therefore, writing is a challenging job, and surviving in the academic world is demanding. Thus, it needs to be of good quality with all the features. However, if the writer has no awareness of what is required for writing and how to make it more interesting for the readers, the text written can turn into a disappointment. Belcher (2009) states that the abstract is an important part of work because it gives readers an idea of what it contains and whether it is worth reading. To put it simply, an abstract acts as a communication tool revealing the importance of the article and indicating whether reading the article will enrich scholars. Tanko (2017) claims that abstracts are the key tools to declare the outcomes researchers have found in their studies. Moreover, Salager-Meyer (1994) and Hartley (2003) define the abstract as the core of the article and the first part that encounters the readers of the article. For this reason, Hartley and Betts (2009) highlight the importance of abstracts by pointing out the fact that a well-written abstract increases the possibility of being read if it gives enough information about the article.

This study investigates and analyzes the M.A. and Ph.D. students' theses abstracts written by EFL Turkish students in the ELT department. As we all know, abstracts are a very significant part of articles, and they are the main part of transferring and reporting the writer's view. The major concern of this issue is probably the poor writing skills of students'. Since the demand for writing abstracts is increasing, it has become more important to focus on the structure of the information, make discourse and do a genre analysis. Therefore, problems that lie beneath this topic will be examined, analyzed, and solved.

This study aims to analyze how M.A. and Ph.D. students at Cyprus International University (CIU) write their thesis abstracts using a genre-based approach and Hyland's framework for abstract analysis (2000). Specifically, the study aims to classify the patterns of the moves employed in the abstracts of CIU M.A. and Ph.D. theses, identify the obligatory and optional moves in the research abstracts, and determine the linguistic features, specifically the tense of the verb and the voice of the verb. Furthermore, it aims to classify the pattern of the rhetorical moves employed in the theses abstracts and determine the linguistic features used by the researchers regarding the following: (a) tense of the verb and (b) voice of the verb. The following research questions will be answered through the present study:

- (1) What are the genre-specific rhetorical features of the abstract sections of M.A. and Ph.D. theses written between the 2009 and 2019 academic years on foreign language education at Cyprus International University?

- (2) What types of moves are there in the abstract sections of M.A. and Ph.D. theses written between the 2009 and 2019 academic years on foreign language education at Cyprus International University?
- (3) What are the obligatory, conventional, and optional moves identified in the abstract sections of M.A. and Ph.D. theses written between the 2009 and 2019 academic years on foreign language education at Cyprus International University?
- (4) What are the linguistic features of the abstract sections of M.A. and Ph.D. theses written between the 2009 and 2019 academic years on foreign language education at Cyprus International University?

THEORETICAL FRAMEWORK

Abstracts are the most important parts of research reports as they determine the value of the whole manuscript. Therefore, as Male (2018: 24) states, "abstracts categorized as an academically written genre containing the rhetorical structure or moves". Writing abstracts can be more challenging than writing the whole report for students or academicians since it requires an awareness of steps or organization. Furthermore, it has to be written systematically and in good organization. According to Othman (2011), effective abstract writing can be ascribed to many factors. One of the aspects written is organization. Abstracts are important for the growth and prosperity of academics in all fields.

Considering the fact that the English language has become an international language used worldwide, it may carry some obstacles within itself for non-native speakers when they are writing their reports. Especially, when they want to convey their thoughts. This could be one of the reasons Hyland (2016) has pointed out why non-native speakers go through difficulties as the linguistic norms of the target language are different from their mother tongue. Similarly, Brown (2000) has stated that not only writing is a complicated activity but also one needs to have the full competencies.

According to Ren and Li (2011), genre analysis has to be done to be able to write well or to overcome the challenges of academic writing. For this reason, Al-Zubaidi (2012), recommended that second language learners' should receive extra help in comprehending the content, building academic language, and incorporating language skills. Furthermore, Zhu (2004), Tardy (2005), and Tas (2008) pointed out that in the process of writing academic manuscripts, appropriate style should be given in a discoursal environment. To overcome the writing difficulties in the native language and to develop effective academic writing skills studying the genre, analysis is the best.

Due to the fact that examiners or readers are very busy doing their work, most of them limit their search, and they want to know from the first glance whether the manuscript is worth reading or not (Alhuqbani, 2013). For this reason, according to Kossasih (2018), four reasons make abstracts play a vital role in articles. The first reason is, it gives information that can be easily read or seen. The second reason is that it can guide readers or provide them with a clue as to whether they will finish

reading the whole content or not. Third, it gives an outline for readers. Fourth, it offers a summary of the most important ideas and thoughts. According to Walter (2008), abstract means, “a shortened form of a speech, article, book, etc., giving only the most important facts or ideas.” Bhatia (1993) defined it as “a description or factual summary of the much longer report, and is meant to give the reader an exact and concise knowledge of the full article.”

Moreover, Martín-Martín (2005: 20) claims that abstracts are written: “to provide the summary of the content of the accompanying article”. Consequently, they all suggest that research article writers should use a series of rhetorical strategies or move structures, and accordingly, there are some popular generic structures to mention. One of them is Bhatia (1993), suggesting four-move generic structures of abstracts: (1) introducing the purpose, (2) describing the method, (3) summarizing the result, and (4) presenting the conclusion. Another one is proposed by Hyland (2004), which has a five-move generic structure such as introduction, purpose, method, product, and conclusion moves. In parallel with these, Santos (1996) and Swales and Feak (2004) proposed a five-move generic structure that include (1) background, (2) aim, (3) method, (4) results, and (5) conclusion moves.

According to Kossasih (2018), the abstract can be contemplated as a genre. Eggins maintains that “Genre is a staged, goal-oriented purposeful activity in which speakers or writers engage as members of our culture. Thus, recognizing the genre of a text has an important role in identifying ways in which a particular text is similar to, reminiscent of, other texts circulating in the culture” (Eggins, 2004: 45). Hence, if the genre of the text cannot be identified, it can be seen as problematic. According to Niu (2013), the genre is a literary term, and genre analysis is a type of discourse that is believed to be done to check the consistency of communicative purposes. Therefore, it involves stylistic text analysis. Abstracts as genres have become an indispensable tool for researchers because it provides them with a chance to select the right article for their research (Piqué-Noguera, 2012).

In 1990, Swales identified genre analysis as parts that constitute moves and linguistic features such as tense, reporting verbs, and the lexical frequency that help writers write a certain text. Thus, it focuses on ideas and meaning and has a sequence of moves that involves communicative function in each move. Therefore, according to his description and identification, all research articles should first identify the topic, then give a review of the previously written articles as the next move, and detect what is not present in the research reports written earlier as a second move, and state the outline of the goals of the study that has been carried out by writing a summary of the outcomes and stating the results as the last move (Upton and Connor, 2001). In line with Upton and Connor (2001), Ding describes the word move as, “A functional unit in a text, being related to the overall task, which is used to identify the textual regularities in certain genres of writing” (Ding, 2007, 20). Having read many articles on the topic, it has been noticed that many experts have defined the term “move analysis” differently. Yelland (2011: 12) defines move analysis as a “piece of text that is evident in the unified functional

meaning of a sentence or group of sentences”. Swales (2004) defines it as a shaper of the overall communicative purpose and the rhetorical structure of the genre. El-Dakhs (2018) explains each move as steps. Moreover, some models have been put forward by Bhatia (1993), Santos (1996), and Hyland (2000). In Bhatia’s version, four moves have been explained, namely, introduction, method, results, and discussion, and this model has been named the IMRD model. In Santos (1996) suggested a new model and put forward five moves, namely, situating the research, presenting the research, describing the methodology, summarizing the findings, and discussing the findings. Finally, in 2000, Hyland gave the final version of the model of moves, which can be detected as similar to Santos’s model because Hyland’s version also included five moves and introduction, purpose, method, product, and conclusion made up the model. **Figure 1** demonstrates the three different models that have been explained.

According to Can et al. (2016), moves can be explained or defined as methods that can be used as a guide for the organizing the text to be written. Therefore, all these studies that have been carried out with the aim of evaluating the language of thesis abstracts are to offer different ways and methods of organizing and controlling the language of second language learners’ to prevent discrepancies for communicative purposes. Furthermore, Kanoksilapatham (2007) stated that the move analysis helps the information to be arranged and identifies the type of information that should be included in the text.

This study employs Hyland’s five-move model, examining the moves in thesis abstracts by CIU students. The results of this study can help non-native speakers in writing their abstracts and can contribute to the enrichment of literature in regards to the structure of moves. Moreover, the results are expected to provide deep insight for academicians to improve their writing skills in their future studies.

METHOD

This study adopts a content analysis method to examine the rhetorical structure of English thesis abstracts. The corpus is the analysis of a total of 50 bachelor theses abstracts at Cyprus International University. The students were selected randomly. The analysis of thesis abstracts involves examining Hyland’s five-move models, which consist of introduction, purpose, method, product, and conclusion.

As shown in **Table 1**, Hyland (2000) presents all five moves and their functions. We examined all moves and their functions sequentially in our analysis.

FINDINGS

To examine abstracts more easily, all 50 abstracts were numbered separately. Hyland’s (2000) model was employed for the analysis. The reason for choosing this model is the fact that it includes five moves, namely, introduction, purpose, methods, product, and conclusion, and his model was used widely in many other research studies. Hyland’s model has been accepted as the

Bhati (1993)
Move 1 Introducing the Purpose
Move 2 Describing Methodology
Move 3 Summarizing the Results
Move 4 Presenting the Conclusion
Santos (1996)
Move 1 Situating the Research
Move 2 Presenting the Research
Move 3 Describing Methodology
Move 4 Summarizing the Findings
Move 5 Discussing the Findings
Hyland (2000)
Move 1 Introduction
Move 2 Purpose
Move 3 Method
Move 4 Product
Move 5 Conclusion

FIGURE 1 | Research article abstracts move models (El-Dakhs, 2018).

most influential in addressing the rhetorical moves in abstracts compared to other suggested models by Santo and Bhatia. In the analysis of move, identification, occurrence, patterns, and the use of tense and voice of moves were also examined. Moreover, the analysis was based on the content or function of the text, and the frequency was used to classify the number of move occurrences in the abstracts. The frequency of occurrence was first recorded and then noted in the tables.

Table 2 lists the frequency of moves found in the abstracts, and as it can be seen from the table, purpose and method have the highest percentages, and conclusion has the lowest percentage. It also shows that only (20%) of these abstracts include complete Hyland's five moves which are: introduction, purpose, method, product, and conclusion. It has been noticed that most English thesis abstracts (70%) comprised only four rhetorical moves with the absence of a conclusion move. It can be said that all abstracts did not have the conclusion move. The absence of some rhetorical moves in English thesis abstracts may cause communication problems with the readers. Moreover, the readers may have difficulty comprehending the text, and may fail to read it further. This may be a drawback for researchers if their research is not read and recognized in the academic community.

TABLE 1 | Hyland's (2000) move model.

Move	Function
Introduction	Establishes the context of the manuscript and motivates the research or discussion
Purpose	Indicates purpose, thesis or hypothesis, outlines the intention behind the manuscript
Method	Provides information on design, procedures, assumption, approach, data, etc.
Product	States main findings or results, the argument, or what was accomplished
Conclusion	Interprets or extends results beyond the scope of the manuscript, draws inferences, points to applications or wider implications

In **Table 3**, the results for tense verb frequency in each move in the abstracts are presented. According to the results obtained, it can be seen that most of the moves in thesis abstracts were written in the present tense. The results showed that the present tense was used more than the past tense in the introduction, purpose, and conclusion in English abstracts. However, the past tense was used more with higher percentages in method and product move.

TABLE 2 | The frequency of moves found in the abstracts.

Moves	Corpus n (50)
Introduction (I)	37 (74%)
Purpose (P)	48 (96%)
Method (M)	46 (92%)
Product (P)	44 (88%)
Conclusion (C)	25 (50%)

TABLE 3 | Verb tense frequency in each move in the abstracts.

Tense of moves	Corpus n (50)
Introduction (I)	
Present	30 (81%)
Past	7 (19%)
Purpose (P)	
Present	43 (90%)
Past	5 (10%)
Method (M)	
Present	6 (13%)
Past	40 (87%)
Product (P)	
Present	15 (34%)
Past	29 (66%)
Conclusion (C)	
Present	16 (64%)
Past	6 (24%)
Future	3 (12%)

TABLE 4 | The voice used in the analyzed abstracts.

Moves	Corpus n (50)	
	Active	Passive
Introduction (I)	21 (57%)	16 (43%)
Purpose (P)	43 (90%)	5 (10%)
Method (M)	21 (46%)	25 (54%)
Product (P)	41 (93%)	3 (7%)
Conclusion (C)	19 (76%)	6 (24%)

It can also be seen that the future tense was only used in the conclusion move with a low percentage (12%), and it cannot be seen in the other moves.

In **Table 4**, the findings showed that the active voice was preferred in the introduction, purpose, product, and conclusion moves. Nevertheless, the passive voice was used in the method move with a higher percentage compared to the active voice. Furthermore, it is possible to say that a mixture of active and passive voices was used in all moves in the analyzed abstracts.

In the identification process of move analysis, the belief in rhetorical function was vital for the analysis of RA abstracts to investigate move frequency, move pattern, and the use of tense and voice. To ensure the reliability of this research, coding was used. The Kanoksilapatham's (2015) criterion for the classification of the frequency of occurrence of each move was employed as the cut-off point.

DISCUSSION

As shown in **Table 1**, all five moves related to Hyland's (2000) model have been presented. In **Table 2**, the frequency of each move differed slightly. The purpose move has been found to have the highest frequency and percentage (96%), followed by the method (92%), product (88%), introduction (74%), and conclusion moves (50%). According to the data obtained, the conclusion move with the least frequency and percentage was an optional move as it was not mentioned in most abstracts. Many researchers preferred not to include this move in their abstracts as this showed they did not give enough importance to it. However, the purpose, method, and product moves were similar in their frequency, but the introduction and conclusion moves seemed to be different, with the least occurring frequency and having the least percentages. The purpose move was the most dominant in all the abstracts that have been examined in this study. The high frequency found in the moves of purpose, method, and product implies that the researchers were aware of the importance of these three moves, whereas the least frequency found in the introduction and conclusion moves demonstrates that some researchers were not aware of the importance of establishing the context of the manuscript and motivating the research or discussion and interpreting or extending the results beyond the scope of the manuscript, drawing inferences, pointing to applications, or suggesting wider implications. The writers had a tendency to begin their abstracts with a purpose move and end the abstracts without drawing references to the field by providing no further suggestions on how to improve their studies in the

future. This finding indicates that the writers of this corpus regard the background, method, and significance of the study as more important. Since there is no previously written similar research on this issue, this can be interpreted as the writers' are lacking rhetorical knowledge on the other two moves (introduction and conclusion), or perhaps they do not attach any importance to mentioning them.

As shown in **Table 3**, the most frequent verb tense in all the five moves was the present tense. However, the most frequent pattern can be seen in the purpose move with a percentage of 90%. Only in the method move past tense was more frequent with a percentage of 87%. The most frequent patterns were in introduction move (a) Pr-P, purpose move (b) Pr-P, method move (c) P-Pr, product move (d) P-Pr, and conclusion move (e) P-Pr-F. It can be seen that the present voice was the most frequently preferred structure, and only in the conclusion move, the future tense was preferred only in three abstracts among 50 manuscripts to give further implications on the study. According to **Table 3**, in the introduction, purpose and conclusion moves present tense was used more frequently and to categorize this present simple and present continuous, and present perfect tenses were the most frequently seen. In the product move, the use of past tense was seen to be more than the present tense. Finally, in the conclusion move, from the findings, it can be understood that all tenses are used, including past, present, and future, however, the further findings reflect that the present tense was used more, followed by past and future tense. The differences in tenses usage and their frequency were in the method and product moves. There was no future tense used in the other moves, while 12% of the ELT abstracts were written in the future form. For the method move, only 13% of the abstracts were written in the present form, while 87% were written in the past tense. Thus, we can say that the most frequent tense used in most moves was present simple, while the past tense was the second most frequent and the future tense was found to be the least frequent in three abstracts only to present the conclusion move. However, other previous studies by Zhang et al. (2012) and Suntara and Usaha (2013) stated that the most dominant tense was the past tense in the studies they have carried out.

When our study is compared with other studies by Tseng (2011) and Alhuqbani (2013), it has been found that they both included the same similarities and differences in tenses usage. This means that in the introduction, purpose, and conclusion moves, they tended to use the present simple tense, whereas in our study, introduction, purpose, product, and conclusion moves present tense was mostly used, but the method and product moves were different in the tense usage because past tense was used more which is similar to Alhuqbani's and Tseng's findings. Tseng found that in method and product moves, past tense usage was more dominant, which is similar to our findings. However, Zhang et al. (2012) suggested that in their findings, present tense was not seen in the method move in the abstracts he examined. This implies that there are variations in the methodology part of the writings of research manuscripts' abstracts.

In **Table 4**, the findings showed that in general, active voice usage was mostly used in all moves. Especially, in the purpose move, the active voice was used by 90% with the highest percentage, while the passive voice was used by 10%.

The second most frequent choice was a mixture of active and passive voices that occurred in the method move. This was similar to Zhang et al. (2012) findings, which stated that active voice was more frequent than passive voice. On the contrary, Tu and Wang (2013) revealed that passive voice was the most frequently used in the RA abstracts they have examined. Moreover, Hanidar (2016) also mentioned that writers prefer to use the passive form more when they are presenting the procedure of their research and stating their findings. Nevertheless, in our findings, a combination of the active and passive voices was used, which indicates that most writers tend to develop their abstracts directly rather than using an indirect style. Only in the product move, the passive voice seem to be the least frequent with the lowest percentage (7%).

Although there have been a lot of studies conducted on abstract writing by both native and non-native speakers of English, my research is different from the previous studies due to the fact that only abstracts written by Turkish students were analyzed. The reason for conducting this research only on Turkish students is to identify strengths and weaknesses in the moves of the abstracts, as there is a wealth of literature available on native students. We believe that this study will contribute to the field, improve the current literature on the topic, and provide a significant step by examining the rhetorical structure of Turkish abstracts within the framework of Hyland's (2000) five-move pattern. The findings of a study conducted by Çandarlı (2012) showed that all abstracts include the introduction move. The reason for this could be the move pattern he followed (IMRC), in which the purpose move had to be stated in the introduction move. In the study carried out by Al-Khasawneh (2017), it was found that in the examined abstracts by native and non-native speakers of English, three moves (introduction, purpose, and product) were available, which implies that both abstract writers are aware of the importance of the moves in their abstracts. However, the only difference was detected in the abstracts of native writers because they included introduction and conclusion moves more than the non-natives. It is believed that this study can help students and novice writers, especially those from non-English backgrounds to facilitate their successful acculturation into their disciplinary community. Another study conducted by Çakır and Fidan (2015) is believed to raise students' awareness and help them choose suitable moves to fulfill their aims. Moreover, it is believed that their study will have important implications for the future. The findings of a study done by Kaya and Yağız (2020) are assumed to help authors in this field be familiar with abstract writing conventions. Also, the results are believed to benefit the production of academic writing materials for scholars and academic writing courses. Since it is a comparative study, the results would help non-natives be aware of the conventions of academic writing and guide them throughout the process involved in global research. However, the results of Ashofteh et al. (2020) demonstrate that non-native speakers use more hedges and are more tentative in their abstracts which shows that they leave more space for opposing views in their claims. Furthermore, Saidi and Khazaei's (2021) study is believed to be used in teaching academic writing to graduate students in English for academic purposes and to help them present their findings globally.

Generally, the authors' aim in conducting research in this field is that they believe it will be beneficial for beginner writers. The suggestions and recommendations and the findings of the results will guide them to produce better academic reports by following the rules to develop writing skills. In this regard, it would be appropriate to say that this research is expected to provide similar pedagogical implications.

CONCLUSION

This study has been carried out to investigate the rhetorical structure of English RA abstracts in ELT theses. Five moves have been identified and analyzed. The present tense and active voice were the most chosen and frequently occurring. As a result of this, the past tense, present perfect tense, and passive voice were seldomly used. Moreover, the findings of this study are presented in a descriptive style since all the results are discussed. For this reason, the authors who will be writing manuscripts in the field of English language teaching should consider these findings and develop their abstracts accordingly. The benefit of this study would be to apply what is useful and needed for the implementation of pedagogical practice. Writing abstracts can be helpful for the development of teaching materials and thesis manuscripts, and with the correct guidance, non-native writers or graduate students who are in the process of developing their careers can be helped to solve their writing problems and organize their work in five moves. Moreover, these five moves would help the development of English abstracts for conference presentations or publications. It is believed that once writers gain a full understanding of grammatical and rhetorical features, they will be able to write their abstracts more effectively. Furthermore, the findings regarding the tense and voice usage presented in this study would be a guide to offer the limitations and drawbacks when writing abstracts. Thus, these restrictions should be considered when carrying out move analysis studies in the future. Peacock (2002) claims that move structures should be taught to non-native speakers and novice writers to help them to be able to write the abstract sections of their research correctly. However, this study is limited since it only focuses on one section, which is abstracts. Likely, another limitation of this study could be the small sample size due to its restriction to 50 abstracts, with the result that it can be generalized to all ELT thesis abstracts. Future studies can focus on the large scale of samples, considering all the suggestions and recommendations made in this research.

DATA AVAILABILITY STATEMENT

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author/s.

AUTHOR CONTRIBUTIONS

SS and BM contributed equally to the manuscript generation, writing process, and approved the submitted version.

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Development of a pronunciation teaching perception scale (PTPS) for preservice English language teachers

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The aim of this present research was to develop a valid and reliable scale to determine preservice teachers' perceptions regarding pronunciation teaching. The research sample consisted of 174 preservice teachers in their fourth year studying in English Language Teaching (ELT) departments in eight different universities in North Cyprus in 2021–2022 the academic year. The data collected within the scope of this study were analyzed through SPSS (ver.24) and SPSS Amos software (ver.24) programs to create a valid and reliable measurement tool for the ELT field. The conducted Exploratory Factor Analysis revealed that the scale consisted of 5 factors and 19 items. Moreover, the Confirmatory Factor Analysis results confirmed the five-factor structure. All the dimensions and the overall scale proved to be highly reliable and fit to be applied in the identification of ELT preservice teachers' pronunciation teaching perceptions. Finally, it is hoped that this new scale will help researchers to investigate pronunciation teaching perceptions in various contexts more reliably.

KEYWORDS

ELT, pronunciation, scale, preservice teachers, perception, language teachers, English language, L2 pronunciation

Introduction

Pronunciation teaching has always been a demanding part of teaching EFL or ESL. However, it is a crucial part of any language teaching program that claims to be offering high quality of language education. The difficulty posed by pronunciation stems mainly from little exposure to and interaction with native speakers and the differences between the phonological systems of English and other languages. Many language teachers nowadays may not prefer to teach pronunciation in the classroom due to their preferences, past learning experiences, or language proficiency levels. Yet, language learners often view pronunciation as being a very challenging task (Wacholtz, 2003). Previous studies on this topic have shown that most pronunciation problems are not only because of physical articulatory problems but also due to L2's cognitive causes (Baker and McCarthy, 1981; Jones, 1997; Kendrick, 1997; Fraser and Department of Education, 2001; Ahmadi, 2011).

According to Fraser (2011), the problem behind not being able to produce the correct sounds is not only because they cannot physically produce the sounds, but also because they cannot distinguish between the sounds to be able to organize and manipulate them

as required in the L2 sound system. Especially, in adult ESL programs, language teachers have difficulties in meeting pronunciation learning needs since they lack teaching skills, confidence, and knowledge about teaching certain aspects of pronunciation. Hence, these studies have shown that methodology, curriculum, and techniques need to be improved to attain global standards.

Regarding methodology, for instance, it is known that the teaching method affects the way non-native preservice teachers learn the target language pronunciation system during their education. For example, if a student is studying English as a foreign language using the Grammar-Translation method, we cannot expect her/him to pronounce every word correctly since there is no emphasis on pronunciation in classes. Jones (1997) states that language teachers who teach the target language through the Auditory-Linguistic or Direct Method attach special importance to pronunciation. Furthermore, in the Auditory-Linguistic method, “pronunciation is taught from the beginning to get students to distinguish between members of minimal pairs in language laboratories” (Larsen-Freeman, 2000, p. 46). Similarly, according to Larsen-Freeman (2002), students are expected to demonstrate communicative evidence by using the target language in Communicative Language Teaching. They are supposed to speak L2 fluently, however, there is no need for complete accuracy.

Derwing and Munro (2009) claimed that speaking with a non-native accent might have significant psychological, social, and communicational consequences in EFL contexts. This will obviously be affecting preservice and in-service teachers’ beliefs about teaching pronunciation in the following years when they are placed in their teacher positions in classes. The relevant literature has focused on different aspects of pronunciation teaching. Some work has been done on computer-assisted pronunciation teaching (e.g., Levis, 2007). Other research has focused on examining learners’ attitudes to the target language as an important factor that helps learners acquire the correct articulation of the sounds and feel motivated (e.g., McKenzie, 2008).

As far as teacher education is concerned, it is important to reveal the perceptions of preservice teachers about learning and teaching the phonological aspects of EFL as preservice teachers are those who will be the future language teachers. Therefore, their perceptions need to be examined and reflected on systematically. Concerning the past 20 years, there have been many studies in the field of teaching and learning pronunciation to reveal learners’ and teachers’ preferences (Brown, 1992; Claire, 1993; Fraser, 2000; Yates, 2003; Ocampo-Rodríguez et al., 2019). However, the most recent research has focused on different areas of L2 pronunciation. In a state-of-the-art article, Demir and Kartal (2022) aimed at mapping and analyzing L2 pronunciation articles published between 1977 and 2020 and indexed in the Social Science Citation Index (SSCI) in the Web of Science (WoS) database. As significant results, they revealed the influential sources, featured documents, and authors in the field.

Moreover, they mapped the most cited references, publications, and authors to help researchers visualize the intellectual structure of the field of L2 pronunciation by clustering.

More specifically, Suzukida and Saito (2022) examined 40 extemporaneous speech samples gathered by Japanese learners to reveal segmental and suprasegmental factors. Subsequently, they presented different levels of global L2 pronunciation proficiency. Furthermore, in a study conducted by Tsunemoto et al. (2020) on 77 Japanese preservice teachers revealed their beliefs about pronunciation teaching. Their findings confirmed that preservice teachers could be categorized into two distinct profiles defined by contributions of their experience.

The first profile consisted of those who had the quality of language learning/teaching experience and pronunciation-related instruction. The second group was composed of those whose beliefs about pronunciation teaching shape the teachability of L2 pronunciation and approaches used in class. Besides, teacher candidates with more experience were found to be more skeptical regarding learning and teaching L2 pronunciation compared to those with less experience. In line with these findings, regarding the pronunciation teaching perception of preservice teachers, to the best of our knowledge, no research has developed a pronunciation measurement scale for investigating preservice English language teachers’ L2 pronunciation teaching perceptions. Hence, the development of such a scale would be a significant contribution to the existing literature in the field.

Methodology

Participants

The sample consisted of 174 preservice teachers from eight different ELT departments in North Cyprus in the 2021–2022 academic year. All the departments and programs were accredited by the Higher Education Council in Turkey. The preservice teachers were fourth year ELT students chosen based on the stratified sampling technique (Sharma, 2017). The total population of fourth year teacher candidates were two hundred and eighty-six (286) in those universities and the number of preservice teachers reached was two hundred and twenty (220). Out of the 220 potential participants, one hundred and seventy-six (176) volunteered to fill in the questionnaire. However, two (2) questionnaires were excluded as they were not fully completed. In the end, one hundred and seventy-four (174) qualified as participants in this study.

Data collection procedure

The study used a mixed-method design which consisted of a qualitative approach followed by a quantitative approach. In order to collect rich qualitative data to address the research

questions more effectively, first, semi-structured interviews with preservice teachers were conducted. The interviewees belonged to eight different universities in Kyrenia, Nicosia, Famagusta, and Morphou. Secondly, the obtained data were subjected to thematic content analyses. The resulting 66 items were transcribed, and were placed under three codes, namely attitude, emotion, and motivation. For the validity check, the items were also sent to three field experts to get feedback. The items were revised based on the feedback and then distributed to a target population of 220 preservice teachers in ELT departments. One hundred and seventy-four (174) of them responded. After the quantitative data collection, the replies were typed in the SPSS (ver.24) software program to check whether the items on the scale worked or not. Finally, an exploratory factor analysis was conducted on the scale.

Data analysis

First, exploratory factor analysis was applied. The inference method that had principal component analysis was used in this analysis. Next, the rotation method used involved Kaiser normalization and direct Oblimin (methods). The most important reason for using this method was the component correlation matrix.

Items with an anti-image value of <0.50 , which were distributed across more than one factor according to the pattern matrix, items with an ensemble inference variance value of <0.40 , and factors with a difference of <0.10 were removed. According to these parameters, exploratory factor analysis was repeated 18 times and a five-factor structure consisting of 19 items was obtained. Confirmatory factor analysis was performed with Amos software program to confirm the validity of this construct. In the confirmatory factor analysis, model fit values were tested with the maximum likelihood method, and it was found that the model fit values were met with the parameters in the literature (Yaşlıoğlu, 2017). Finally, after performing exploratory factor analysis, confirmatory factor analysis and concordance validity, the Cronbach Alpha internal consistency coefficient was calculated to determine the reliability of the measurement tool. It was found that all dimensions and the overall scale were significantly reliable. As a result of the conducted analyses, a measurement tool with significant validity and reliability was obtained.

Results

The KMO value as displayed in Table 1 was 0.860 and Bartlett's Test of Sphericity was significant ($\chi^2 = 1,474.092$, $p < 0.001$). According to Kaiser (1974), KMO value of 0.80 and above is considered good. Based on all these values, it is seen that

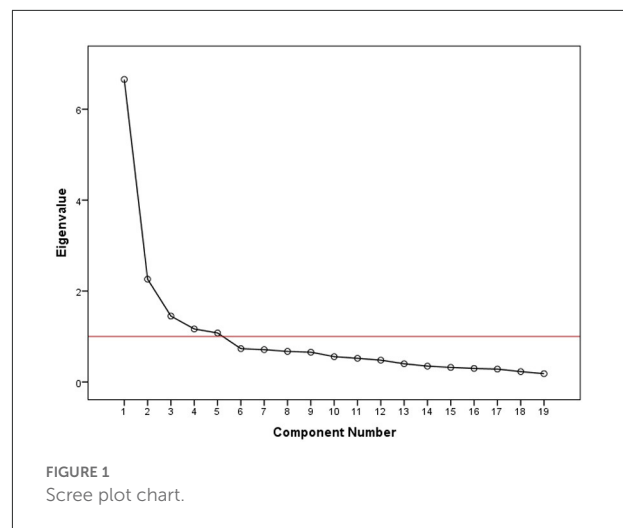


TABLE 1 Kaiser meyer olkin (KMO) and bartlett sphericity tests.

Kaiser-meyer-olkin measure of sampling adequacy		0.860
Bartlett's Test of Sphericity	χ^2	1,474.092
	df	171
	p	0.000

the number of samples collected for the scale met the criteria of factor analysis.

As can clearly be seen in the Scree Plot chart above (Figure 1), the red line represents the point value 1. Furthermore, five different cut-off points on the red line correspond to the five sub-dimensions of the developed scale.

When the values obtained from this scale were examined, it was seen Table 2 that the lowest factor loading value was 0.508 and the highest factor loading value was 0.852. According to Tabachnick and Fidel (2011), the lowest factor loading value was supposed to be 0.32. However, all the values obtained in this study were found higher than the lower limit of 0.32. On the other hand, the total explained variance rate was calculated as 66.36%. The explained variance rate in this study, which is supposed to be at least 50% (Yaşlıoğlu, 2017), appeared to be well above the lowest limit, i.e., 16.36% greater than the minimum value. Besides, the communalities extraction variance value in this scale, which is supposed to be at least 0.50 (Yaşlıoğlu, 2017), was found 0.508, which appeared to be slightly above the lowest limit. As for the factors, the first factor consisted of five items and its Eigenvalues value was 6.654. Further, the lowest factor loading value was 0.508 while the highest factor loading value was 0.765. The second factor consisted of two items and its Eigenvalues value was found 2.262. Moreover, the lowest factor loading value was calculated as 0.844 and the highest value

TABLE 2 Distribution of the scale by factors, item factor loads and factor variances.

New item number	Old item number	Communalities extraction variance	Fac. 1	Fac. 2	Fac. 3	Fac. 4	Fac. 5
1	s62	0.600	0.765				
2	s61	0.678	0.732				
3	s59	0.632	0.689				
4	s60	0.613	0.668				
5	s53	0.518	0.508				
6	s33	0.758		0.851			
4	s34	0.806		0.844			
8	s36	0.730			0.852		
9	s37	0.735			0.765		
10	s41	0.524			0.696		
11	s35	0.600			0.641		
12	s43	0.505			0.530		
13	s46	0.715				0.773	
14	s49	0.668				0.771	
15	s47	0.614				0.720	
16	s56	0.782					−0.836
17	s51	0.752					−0.828
18	s57	0.776					−0.817
19	s54	0.606					−0.665
			Fac. 1	Fac. 2	Fac. 3	Fac. 4	Fac. 5
Eigenvalues			6.654	2.262	1.450	1.166	1.078
Explained variance value %			35.023	11.903	7.630	6.139	5.672
Total variance %			66.366				

TABLE 3 Confirmatory factor analysis model fit values.

Model fit values	ELT preservice teachers' pronunciation teaching perception scale values	Excellent fit values	Acceptable fit values
χ^2/df	1.477	≤ 3	$\leq 4-5$
RMSEA	0.053	≤ 0.05	0.06–0.08
NFI	0.865	≥ 0.95	0.94–0.90
TLI	0.94	> 0.95	> 0.80
IFI	0.952	≥ 0.95	0.94–0.90
CFI	0.951	≥ 0.95	0.90–0.95
GFI	0.897	≥ 0.95	0.90–0.95
AGFI	0.861	≥ 0.90	0.85–0.95
RMR	0.06	≤ 0.05	0.05–0.10

was found 0.851. The third factor consisted of 5 items and its Eigenvalues value was calculated as 1.450.

On the other hand, the lowest factor loading value was obtained as 0.530 and the highest value was calculated as 0.852. The fourth factor consisted of three items and its Eigenvalues value was found as 1.166. The lowest factor loading value was found 0.720 and the highest factor loading value was calculated as 0.773. The last factor consisted of four items and its Eigenvalues value was obtained as 1.078. The lowest factor loading value was found 0.665 and the highest factor loading value was calculated as 0.836.

Confirmatory factor analysis findings

Table 3 below presents the findings of the confirmatory factor analysis.

Table 3 above displays the acceptable and the excellent fit values and the values obtained in the study. For the excellent and the acceptable fit values, several claims have been put forward in the literature. For instance, the χ^2/df value according to Wheaton et al. (1977) is supposed to be below 5 while for

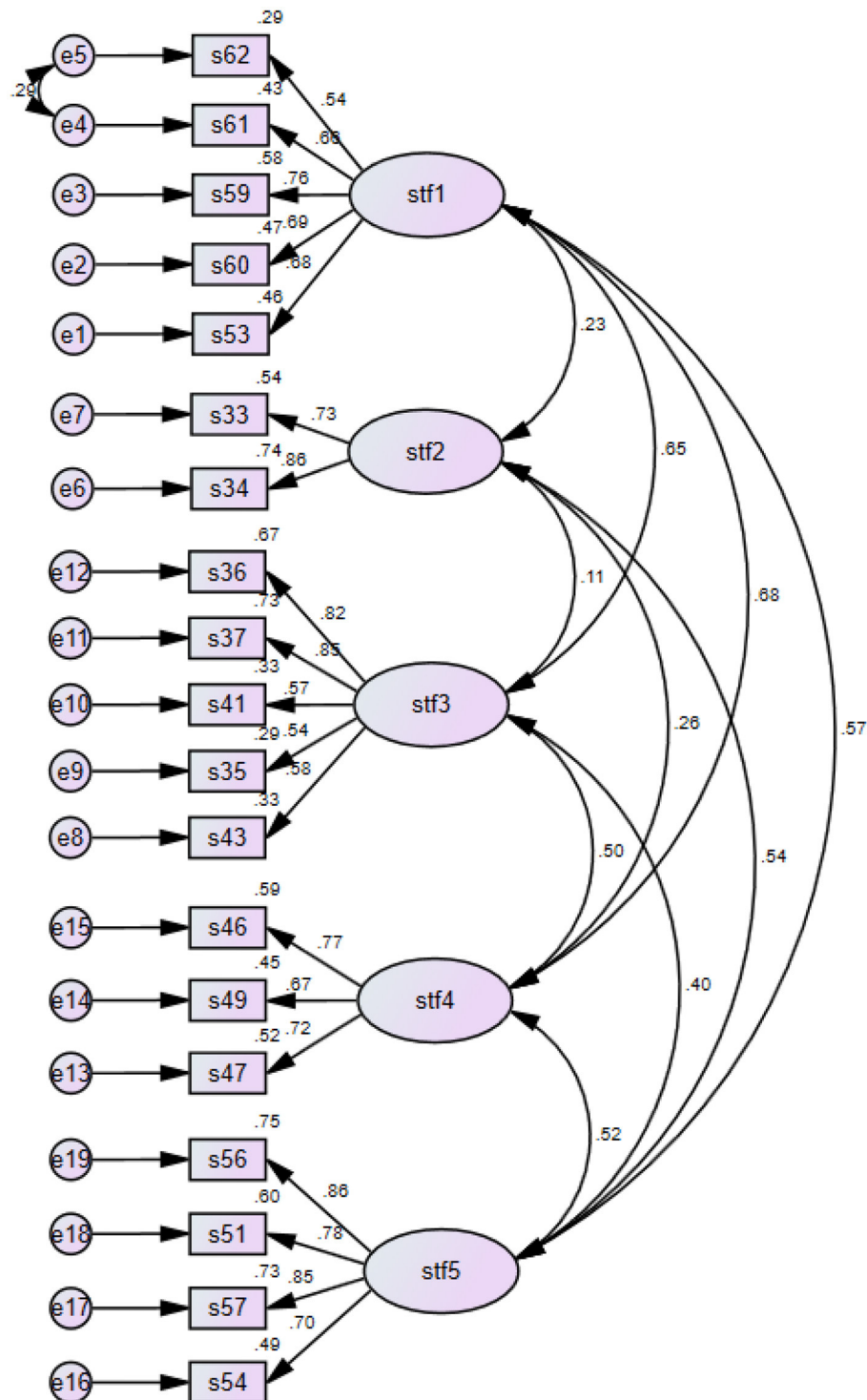


FIGURE 2
Confirmatory factor analysis factor distribution path diagram.

Tabachnick and Fidell (2007) it is supposed to be below 2 to satisfy the fit value condition. The value obtained in this study ($\chi^2/df = 1.477$) met the value of excellent fit. It was

stated by Yaşlıoğlu (2017) that the closer the RMSEA value to 0.1, the worse the fit, and the closer it is to 0, the better the fit.

Discussion and conclusion

The RMSEA value in this model, which is among the acceptable reference values, was calculated as 0.53. On the other hand, the NFI value was found 0.865, which is slightly below the acceptable fit value. According to Mulaik et al. (1989), the NFI value is accepted as low in samples smaller than 200. The sample size (n.174) in this study is <200 and it affects the NFI

value below 0.90. Since the sample value was low in this study, TLI value was supposed to be checked as stated by Yaşlıoğlu (2017). According to Byrne (2011), this value (0.940) above the threshold value of >0.80, which is slightly below the 0.95 value, was considered excellent value. Therefore, it can be stated that a good value was achieved based on this model. The IFI value of this scale was calculated as 0.952. It is above the 0.95 value and is considered excellent (Yaşlıoğlu, 2017). When the CFI value was examined, the value of the model, which had a value above 0.95 and accepted as an excellent fit according to Bentler and Bonett (1980), was found 0.951. The GFI value of this model was calculated as 0.897, which was slightly below the lower limit of 0.90 and this value is sensitive to the sample size. Therefore, it is thought that it affects the fact that it is below 0.90. On the other hand, the AGFI value was found 0.861 and was above the lower limit of 0.85, providing the acceptable fit reference value. As for the RMR value, it was found 0.60, and a value between 0.05 and 0.10 indicates that it meets the acceptable parameters. According to the sources in the literature, it was seen that the model fit values of this study met the acceptable fit condition, and some values met the perfect fit values (Schermelleh-Engel and Moosbrugger, 2003; Tabachnick

TABLE 4 Cronbach-alpha reliability analysis findings.

Sub dimensions	Number of participants	Number of items in sub-dimension	Cronbach-alpha internal consistency coefficient (α)
Fac. 1	174	5	0.806
	174	2	0.768
	174	5	0.797
	174	3	0.759
	174	4	0.871
	174	19	0.890

TABLE 5 Pronunciation teaching perception scale (PTPS) for preservice English language teachers.

New item number	Old item number	Item description	x	ss
Factor 1. Classroom Context				
1	s62	English pronunciation must be taught in English classes.	4.13	0.937
2	s61	English pronunciation skills are important in English classes.	4.22	0.868
3	s59	English pronunciation can be acquired with practice in class.	4.15	0.874
4	s60	English pronunciation can be acquired with exposure in class.	4.05	0.875
5	s53	I feel better when I overcome a pronunciation problem in class.	4.17	1.000
Factor 2. Out-of-class Context				
6	s33	I use English in public (e.g., restaurants, shopping centers).	3.51	1.201
4	s34	I use English outside the classroom.	3.79	1.062
Factor 3. Learning Styles				
8	s36	I learn English pronunciation better through explanations in class.	3.71	0.948
9	s37	I learn English pronunciation better through examples in class.	3.93	0.910
10	s41	I learn English pronunciation better through gestures in class.	3.74	1.041
11	s35	I learn English pronunciation better through demonstrations in class.	3.70	0.987
12	s43	I like learning English pronunciation at school.	3.83	1.114
Factor 4. Beliefs about Learning English				
13	s46	I like learning English because it is one of the most interesting languages.	4.22	0.911
14	s49	I like learning English as it makes me feel proud.	4.23	0.909
15	s47	I like learning English because it helps me to improve academically.	4.38	0.771
Factor 5. In-class Activities of Interest				
16	s56	I enjoy communication in English in class.	4.12	0.920
17	s51	I enjoy speaking English in class.	4.19	0.993
18	s57	I enjoy discussions in English in class.	3.94	1.087
19	s54	I enjoy acting in English in class.	3.84	1.090

and Fidell, 2007; Byrne, 2011; Yaşlioglu, 2017). Furthermore, confirmatory factor analysis factor distribution path diagram below (Figure 2), which outlines the correlations between the factors, supports the findings obtained in the study.

Figure 2 above displays the distribution of five factors obtained from the confirmatory factor analysis. It clearly presents the relationship of each factor with another in percentages. For instance, the relationship between the first factor and the fourth factor is 68%.

Reliability findings

The following table (Table 4) displays the Cronbach-Alpha reliability analysis findings of the scale.

According to Kiliç (2016), a Cronbach-Alpha value above 0.7 is considered good and 0.9 is excellent. All the values in this model were above 0.70 (ranging from 0.759 to 0.890 across the sub-dimensions) and therefore all dimensions and the overall scale appeared highly reliable.

Table 5 below shows the descriptive statistics of preservice teachers' pronunciation teaching perceptions scale items.

A brief discussion of the relevance and potential contribution of our study to the existing literature is in order here. Some studies have focused on examining segmental and suprasegmental factors to distinguish different levels of global second language pronunciation proficiency (Suzukida and Saito, 2022) and some focused on examining the overall effect of mobile devices on L2 pronunciation (Tseng et al., 2022). On the other hand, some have attempted to reveal the pronunciation improvement of certain English consonantal sounds (Ercan and Kunt, 2019). A number of studies have looked into preservice teachers' beliefs and perspectives regarding pronunciation teaching. For instance, a study conducted by Tsunemoto et al. (2020) on 77 Japanese preservice teachers revealed their beliefs about pronunciation teaching. Results indicated that educators should encourage teacher candidates to emphasize on L2 pronunciation teaching. It is considered that our newly developed scale would contribute to such contexts such as the Japanese context to reveal more evidence of the perceptions of preservice teachers and shape targeted dimensions for future teacher candidates.

Parallel to research on perceptions, a study that could be regarded as a close match to ours in terms of instrumentation, investigated ELT department students' deeper understanding of pronunciation problems and pronunciation teaching revealed that it was possible to improve pronunciation skills (Yavuz and Keser, 2019). Since the study adopted and used 12 Likert scale items by Ducate and Lomicka (2009), it could be forecasted that richer data could be gathered through our newly developed scale in such ELT contexts to provide the literature with more specific findings regarding pronunciation teaching perceptions

of preservice teachers as it has 5 factors and met excellent fit value ($\chi^2/df = 1.477$).

To sum up, the current study had its own focus on developing an effective tool for identifying preservice teachers' pronunciation teaching perceptions in EFL/ESL contexts around the world. Conducted exploratory and confirmatory factor analyses confirmed that the scale had five factors as *Classroom Context*, *Out-of-class Context*, *Learning Styles*, *Beliefs about Learning English*, and *In-class Activities of Interest*. As the Cronbach-Alpha values in our model were above 0.7 (see Table 4) and the χ^2/df value was 1.477, it could be concluded that the developed scale was a highly reliable tool for revealing preservice teachers' perceptions regarding pronunciation teaching (Tabachnick and Fidell, 2007; Kiliç, 2016; Yaşlioglu, 2017). Consequently, the Pronunciation Teaching Perception Scale (PTPS) designed for the stated purpose proved to be an appropriate and effective instrument (see Appendix 1). Finally, the major implication for the ELT field is that the use of such a scale would help to identify pronunciation teaching perceptions more reliably, and, therefore, provide evidence on which the appropriate teaching techniques, methods, and the curriculum will be based.

Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

Ethics statement

The current study involving human participants was reviewed and approved by the Scientific Research and Publication Ethics Board of the Eastern Mediterranean University (Reference No: ETK00-2021-0131, Issue: 91). The patients/participants provided their written informed consent to participate in this study. Written informed consent was obtained from the individual(s) for the publication of any potentially identifiable images or data included in this article.

Author contributions

Both authors listed have made a substantial, direct, and intellectual contribution to the work and approved it for publication.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Appendix

Appendix 1. Pronunciation Perception Scale for Preservice English Language Teachers.

Instructions

This survey is designed to identify preservice English language teachers' pronunciation teaching perceptions. Please read the statements carefully and tick the response (1, 2, 3, 4 or 5) on the answer sheet that expresses your opinion best about each statement. There are no right or wrong answers to these statements. Please make no marks on the items. If you have any questions, please inform the researcher(s) immediately.

Pronunciation Teaching Perception Scale (PTPS) for Preservice English Language Teachers

Item No.		1: Strongly Disagree 2: Disagree 3: Neutral 4: Agree 5: Strongly Agree				
		1	2	3	4	5
Factor 1. Classroom Context						
1	English pronunciation must be taught in English classes.					
2	English pronunciation skills are important in English classes.					
3	English pronunciation can be acquired with practice in class.					
4	English pronunciation can be acquired with exposure in class.					
5	I feel better when I overcome a pronunciation problem in class.					
Factor 2. Out-of-class Context						
6	I use English in public (e.g., restaurants, shopping centers).					
7	I use English outside the classroom.					
Factor 3. Learning Styles						
8	I learn English pronunciation better through explanations in class.					
9	I learn English pronunciation better through examples in class.					
10	I learn English pronunciation better through gestures in class.					
11	I learn English pronunciation better through demonstrations in class.					
12	I like learning English pronunciation at school.					
Factor 4. Beliefs about Learning English						
13	I like learning English because it is one of the most interesting languages.					
14	I like learning English as it makes me feel proud.					
15	I like learning English because it helps me to improve academically.					
Factor 5. In-class Activities of Interest						
16	I enjoy communication in English in class.					
17	I enjoy speaking English in class.					
18	I enjoy discussions in English in class.					
19	I enjoy acting in English in class.					



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Advantages and disadvantages of distance teaching in foreign language education during COVID-19

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This article aimed to analyze the identified advantages and disadvantages of distance education in foreign language teaching in the transition to distance learning due to the COVID-19 pandemic. The data were collected through questionnaires and observations. A total of 298 university students participated in the research. The results of this research show that (1) the quality parameters of the changes and additions to the curriculum of foreign language teaching, (2) the final evaluation of the students in these subjects conducted in distance learning compared to the results shown in the offline form, (3) the satisfaction of the students with the electronic format of academic subjects, and (4) the formation of communicative competences under the changed learning conditions. The results are based not only on the final grades in the control sections in written and oral form but also on the emotional evaluation of the distance format teaching units in foreign languages. In addition, the results have shown that a complete transition to distance education is possible at COVID as a contingency measure. The research results will help to solve problematic issues related to the organization of the educational process and the need to comply with sanitary regulations.

KEYWORDS

COVID-19 pandemic, foreign language teaching, distance teaching, distance education, foreign language education policies

Introduction

In the extreme conditions of the spread of coronavirus infection, secondary and higher educational institutions in Russia, following the recommendation of the Ministry of Science and Higher Education of the Russian Federation, decided to switch to a distance learning format (Kobyshcheva et al., 2021). Before the pandemic, this training format was used in isolated cases and mainly in the context of e-learning (Todri et al., 2020). Since the Internet platform TEAMS was already successfully used at the Peoples' Friendship University of Russia (RUDN) in educational programs, the

forced transition to distance learning did not cause serious technical difficulties or problems. All students mastered the use of educational Internet resources on the specified platform and the format of communication with teaching staff *via* company mail (Nevskaya and Kozhukhova, 2021).

The most important issues in solving the problems of an urgent transition to e-learning were the willingness of the teaching staff to provide the teaching materials and to develop the necessary competencies within the new educational format (Junus et al., 2021). On the other hand, there is a problem with the technical equipment of each student and the ability to connect to Internet resources at home. An equally important component of the transition to a new format was the need to develop skills in future professionals to master the material through distance learning in a foreign language for professional purposes (Grunis et al., 2020).

Together with the Department of Information Technology and Support specialists, the university administration has urgently organized and implemented all the necessary measures to support the teaching staff in managing the educational process under the new conditions. In consultation with the profile departments and methodological committees, recommendations were developed for adapting the curriculum to transition to distance education. One week before the start of the online training, the surveys on the availability of technical equipment were conducted in all student groups during the face-to-face sessions. Consultations were held on connecting to the classroom and the algorithm for taking a class in a new format. Since the onset of the COVID-19 pandemic, many studies have addressed the advantages and disadvantages of distance learning in higher education. However, few studies address the views of Russian higher education students (Masalimova et al., 2022). For this reason, this article aims to analyze the identified advantages and disadvantages of distance education in foreign language learning in the transition to distance education due to the pandemic COVID-19.

Literature review

Many researchers (Puspitasari et al., 2018; Nariyati et al., 2020; Santos, 2020; Akhmadieva et al., 2021; Kuzembayeva et al., 2022; Sekyere-Asiedu et al., 2022) have pointed out that new effective teaching methods and strategies are the most important component of foreign language teaching under the changing conditions. Some studies (Chigisheva et al., 2017, 2021; Flack et al., 2020; Kitishat et al., 2020; Oyedotun, 2020; Prikhodko and Polyakova, 2020) have particularly addressed issues of overcoming the unpreparedness (both psychological and methodological-didactic) of a significant part of higher education teachers for teaching in a new format. In parallel, some studies (Ferri et al., 2020; Jacques et al., 2020; Peters et al., 2020; Soltovets et al., 2021) have examined the technological,

pedagogical, and social problems encountered in the transition to distance education. Poor Internet connections and failures (on the part of students), compounded by inadequate digital skills on the part of both teachers and students, contributed to the challenges. The situation was exacerbated by social problems related to limited space at home, as other family members also worked remotely (Ferri et al., 2020). Thus, the need to navigate the new communication format evoked stress.

At the same time, many researchers have noted the positive aspects of teaching systems connected with the transition to extensive use of digital technologies. They assert that such changes heavily contributed to transforming the entire organizational component of the higher education system (Rapanta et al., 2020; Soudien, 2020; Ivanova et al., 2022; Uzunboylu et al., 2022). The increased activity of students in the framework of videoconferences, information exchange in chat rooms, social networks, and podcasts is especially highlighted (Sá and Serpa, 2020). Hodges et al. (2020) added a new concept named emergency remote teaching (ERT) to the literature. They identified that ERT as below:

“... emergency remote teaching (ERT) is a temporary shift of instructional delivery to an alternate delivery mode due to crisis circumstances. It involves using fully remote teaching solutions for instruction or education that would otherwise be delivered face-to-face or as blended or hybrid courses, which will return to that format once the crisis or emergency has abated.”

Later, Huertas-Abril et al. (2021) identified a new term, “Emergency Remote Language Teaching,” after the concept of ERT of Hodges et al. (2020). This new concept emphasizes that teaching during emergencies and crises such as the pandemic caused by COVID-19 is neither remote teaching nor online teaching in the strict sense.

In previous studies, Sharma et al. (2020) examined college students' satisfaction with online learning during the Coronavirus disease pandemic (COVID-19). Their results showed that more than half (53.5%) of the students were satisfied with online learning, while 29.7% were neutral. The results also revealed that all four domains were positively correlated with each other and with students' overall satisfaction with learning. In multivariate analysis, female gender, WiFi as an Internet learning modality, and rating of learning dimensions were the most significant predictors of student satisfaction. In another research, Azizi et al. (2020) investigated and determined the factors influencing students' intention to use blended learning. They found that performance expectancy (PE), effort expectancy (EE), social influence (SI), facilitating conditions (FC), hedonic motivation (HM), value for money (PV), and habit (HT) had a significant influence on students' intention to use blended learning. In addition, the intention to use blended learning significantly impacted students' actual use of blended learning. A study by Yilmaz İnce et al. (2020) investigated students' knowledge and views about distance education in the COVID-19

pandemic. The results showed that participants' ability to have computers and the Internet influenced their views about distance education. [Elfirdoussi et al. \(2020\)](#) studied distance learning in Morocco during the pandemic COVID-19. This study surveyed 3,037 students enrolled in various stages of higher education programs. The results showed that students indicated that online learning was not more interesting than regular learning.

[Demuyakor \(2020\)](#) sought to determine whether Ghanaian international students in China were satisfied with "mass" online learning in higher educational institutions in Beijing, China. The study's results suggested that introducing online learning programs was very good, as most students surveyed supported the initiative. The study also found that students outside China spend as much money to buy Internet data for online learning because of COVID-19. Last but not least, the study found that the Internet connection for students in the dormitories of various universities in China is very slow. [Bozavli \(2021\)](#) examined the learning experiences of foreign language students who participated in a distance learning course during the pandemic and their beliefs about whether it is possible to learn a foreign language without school. The results showed that students believed they could not learn a foreign language without attending school. In addition, the results indicated that their digital literacy skills in distance learning are insufficient, and the students show low motivation to learn. In a recent study, [studied the expectations of university students regarding the conversion of education to distance learning during the period of COVID-19. The results showed that the most important factors influencing students' feelings and convincing them to switch from classroom teaching to teaching in the distance learning model are the feeling of pleasure in distance education and a sense of self-efficacy.](#)

[Masalimova et al. \(2022\)](#) studied students' attitudes toward distance education in COVID-19. They analyzed a total of 27 articles. Their analyses revealed that when asked to compare face-to-face and online learning techniques, students claim that online learning has the potential to compensate for any limitations caused by the pandemic. Student views and satisfaction vary widely, ranging from good to negative. Distance learning is beneficial because it allows learning anytime and from any location. Distance education is useful for both performance and learning. Distance learning contributes to many physical and mental health problems, including anxiety, anxiety, stress, and attention problems. The analysis of publications on the stated topic allowed the authors of the study to conclude that by now, the issues related to the significant difference in the organization of online learning of foreign languages and the use of educational technologies in the format of e-learning in universities during the period of restrictions due to the pandemic because of COVID-19. Issues such as the role of the professor/instructor and student groups

in improving the quality of instruction in the distance learning format, synchronization problems of interaction and qualitative parameters of feedback, and the effectiveness of pedagogical technologies in collaborative activities require further development.

Methods

The determination of research purposes, data collection instruments, and analyses were based on the literature review conducted by the authors. To answer the research questions, we employed a quantitative research methodology in this research. For this aim, we used quantitative data collection methods (see [Table 1](#)). The authors used the methods of terminological analysis in the process of studying scientific works on the research problem. The authors applied system analysis methods to identify the problem area, determine its relevance, set goals, and generate solutions. Considering the findings of the research, the authors articulated the following hypotheses:

- (1) Adjustments introduced to the educational process organization during the transition to the e-learning format enhance the role of the teacher and determine the choice of learning technologies to form communicative competencies in the changed academic conditions based on various methods of electronic content delivery and available communication tools in the context of electronic information–educational environment.
- (2) Changing needs for learning a foreign language for communicative and professional purposes in the context of a forced transition to the distance learning format presuppose greater self-discipline of students compared to the full-time format of gaining knowledge. This is because, in the process of classroom training, there are such additional motivating factors as mandatory face-to-face presence (lack of opportunity to study the material after the session by its video record) and an evaluating reaction not only from the teacher but also from fellow students to the activity degree in the educational process of the entire group.
- (3) Changes in the conditions and communicative environment of learning a foreign language during a pandemic inevitably lead to a greater workload and emphasis on the student's self-study since a written task does not tolerate inaccurate formulations and digression from the topic. It is more strictly assessed regarding literacy and knowledge of the material.
- (4) The effectiveness of the teaching technologies applied in emergency transition to distance learning due to COVID-19 can be evaluated only after analyzing the final assessment results of students conducted in a distance format compared to the offline results regime.

TABLE 1 Survey results.

No	Question	Yes	No
1	Has the pandemic situation adjusted your educational process? If the answer is yes, please, outline the main changes	93%	17%
2	Do you think you can positively assess the actions of the Law Institute administration and the department of foreign languages to organize the educational process during the pandemic? Please, give your reasons	91%	19%
3	Are there any organizational weaknesses in the educational process that have not been resolved by the Law Institute administration and the department of foreign languages for this period? Please, indicate them	12%	88%
4	Indicate the positive and negative aspects of distance learning		
5	Your suggestions and comments concerning adjusting the online training format		

It was necessary to maintain the stable motivation of students formed (in the course of teaching) by creating conditions for active engagement of each student and teacher in the educational process in the current emergency of conversion to e-learning. The authors focused on the formulation of foundations based on the personal and professional experience of the teachers of the department concerning methods of teaching foreign languages for communicative and professional purposes and new modern technologies of teaching in a distance format (Lisitzina et al., 2015; Bennett, 2018; Lim et al., 2018; Aguilar et al., 2019; Privalova et al., 2019; Sockalingam et al., 2020; Atabekova, 2021). All types of activities previously conducted in the face-to-face teaching format, including the acquisition of new material, assessment of knowledge through evaluation and comments, preparation for midterm review and final examination, organization and management of translation practice, participation in project activities, scientific guidance in the preparation of articles, and oral presentations of students, preparation of the oral defense of theses for bachelor's and master's degrees in a foreign language had to be urgently transferred to the distance learning format.

A week before the transition to a distance learning format, the department held informative, practical sessions with teachers on the effective use of all the main functions of the Microsoft TEAMS program, which is part of the Outlook Office 365 facilities widely used in the RUDN University (Lebedeva et al., 2018; Badiozaman et al., 2020; Code et al., 2020; Hilburg et al., 2020; Khan, 2020). The lesson plan

was developed considering the teachers' feedback. During the classes conducted by the Information Technology (IT) specialist, particular attention was paid to such issues as the formation of study groups, preparation of calendar of classes, use of chat room for communicating group or personal messages, placing various files with assignments, etc.

The algorithm for organizing joint work with the Windows Office applications package was specifically set up to allow all participants of the process to simultaneously work with Word documents, Excel tables, open PowerPoint presentations, and video files. Under a specialist's guidance, the verification mode teachers practiced the screen functions, reminders, calls, invitations to class, and project activities. A special lesson was devoted to such opportunities of the educational platform as a division of work and tasks between groups of students (teams), use of applications, and joint work on a document since the express survey showed that such operations cause particular difficulties for most teachers.

During these lessons, the skills of working with the TEAMS platform were refreshed. Mobile groups of teachers were also formed, within which each participant could always receive the necessary assistance and technical support. This strengthened the confidence of the most pessimistic members. They did not have enough experience organizing the educational process for several years through the telecommunication educational and information system (TEIS RUDN).

A preliminary survey of study groups helped to reveal that only 34% have personal computers and tablets. As the TEAMS training platform can be easily downloaded to any electronic medium, the data obtained was not alarming. But the issue of Fast Internet availability across the country was on the agenda since many students announced their intention to leave Moscow and move to their permanent places of residence during the pandemic and e-learning. To provide all students with equal opportunities under the circumstances, the teacher's mandatory recording of the lesson and open access to it for each student of the study group was established.

One of the department meetings was dedicated to many issues on the urgent transfer of foreign language classes within bachelor's and master's courses to a distance format. The meeting aimed to instruct students on the format and arrangement of their homework, including the correct file name (date, student's name, group number, discipline, and teacher's name), formulation of tasks, parameters for evaluating the work, deadlines for sending the work by the student and receiving the marked paper from the teacher, the format of students' progress sheets and participating in a lesson in a distance format, etc.

Results and discussion

The positions listed above, worked out by the teaching staff of the department of foreign languages of the Law Institute of the

Peoples' Friendship University of Russia, contributed to meeting the program requirements and maintaining the standards of teaching foreign languages to lawyers to be.

After 3 months of work, the team of authors surveyed students and teachers. Its purpose was to identify the level of qualitative assessment by students of the activities of the Law Institute administration and the department of foreign languages in overcoming the challenges of the emergency transition to the e-learning mode. The information obtained was checked for consistency and reliability at the analysis stage. The formulated questions for students reflect the key points related to the research statement. The data obtained in the study were statistically processed and analyzed, which formed the basis for formulating proposals for adjusting the program materials.

As the survey of teachers and students after 3 months of working in the distance format showed, the technical aspects worked out in advance. They voiced that the first organizational lessons dramatically contributed to maintaining the level of motivation formed during the face-to-face studies. The survey involved students taking the undergraduate and graduate programs at the Law Institute and those who study a foreign language for communicative and professional purposes. The answers to the questionnaire were received from 204 respondents.

In total, 93% of the respondents gave a positive answer to the first item of the questionnaire. In the comments on the positive and negative aspects of the distance learning format, the following main problems that students faced in the process of the emergency transition to a remote learning format have been highlighted:

- (1) Loss of personal contact with the teacher–78%.
- (2) Concentration difficulties during preparation for classes at home (distractions in the limited living space)–67%.
- (3) Lower individual activity in class (interference of family members who are also in self-isolation)–58%.
- (4) Many serious problems associated with the constant use of the Internet to connect to the TEAMS training platform: lack of Internet and interruptions in Internet connection (especially outside Moscow and Moscow region)–79%; unreasonably high time loss during classes for constant reconnection to the platform–63%; worse health conditions due to continuous sitting in front of monitors (more than 12 h a day)–81%.
- (5) Stress (68%) leads to increased psychological frustration (54%) due to the need to periodically turn on the camera and microphone during the oral answer.

In the answers to the second question, most students (91%) positively assessed the efforts of the Law Institute administration and the entire team of the department of foreign languages in an efficient and thoughtfully organized format of the transition of the educational process to a remote mode. The transition process took only a week; the classes were held strictly according

to the schedule approved at the beginning of the semester. 74% of respondents highly appreciated that all the necessary electronic links came by email in advance and with a 15-min reminder before the start of the lesson.

All files with carefully formulated assignments and specified deadlines were sent to students in advance; this contributed to a clear algorithm allowing them to receive the marked papers to better prepare for the forthcoming session (86%). Seventy-seven percentage of students positively assessed the efforts of the department of foreign languages to offer interesting project assignments and to involve students in professionally oriented research activities during a difficult period of emergency transition to the e-learning format.

All survey participants supported video recording the lessons as another chance to view and study the educational material.

At the same time, 14% of students' answers concerning organizational shortcomings (third question in the Table) indicated cases of informing "at the last minute,"; that greatly hindered planning the workload and increased online learning. An important aspect noted by 45% of respondents was the academic schedule. Students criticized it for the uneven distribution of lectures and seminars throughout the week.

The following suggestions for adjustments to the format of online education of law students have been formulated:

- (1) Preserving in a distance format the possibility of counseling with teachers according to the schedule approved at the beginning of the semester for classroom format (60%).
- (2) Taking account of the students' answers sent in the chat room in case of problems with the microphone during the lesson (36%).

The authors also conducted an express survey among the foreign languages teaching staff department. The obtained data revealed the problems that arose during the preparation and conduct of distance learning sessions. The majority (84%) noted the stressful situation of the need to move to a new teaching format and search for new solutions in the context of familiar teaching tasks. For older teachers (53%), difficulties were associated with mastering unfamiliar electronic platforms and using new technological methods of working in a digital environment to "keep in step with the times." Ninety-three percentage of respondents expressed concerns about the organization and conduct of upcoming intermediate and final assessments of students in a distance format. They were connected not with designing control and assessment materials but primarily with the video support of the oral and written testing to exclude cheating and prompts.

The annual students' conference "We speak legal English, French, German, Spanish, Chinese, Korean, Japanese, and Arabic" was held in a distance format engaging RUDN students and postgraduates from more than a dozen countries, as well as

students from other universities in Moscow and across Russia. In preparation for the conference, individual work was carried out with each participant to comply with the requirements for article formatting according to American Psychological Association (APA) international standards. Particular attention was paid to the preparation of oral presentations using PowerPoint tools. The following points were positively noted in the responses of the conference participants:

- (1) Comprehensive and timely assistance from the faculty of the department of foreign languages *via* the TEAMS platform.
- (2) Timely receipt of an electronic link for connection, automatic notification of the beginning of the conference, and technical support in case of problems associated with various operating systems.
- (3) Ability to automatically turn on subtitles during the conference broadcast.

TABLE 2 Final exam results at bachelor level.

Grades	2019 (<i>n</i> = 145)	2020 (<i>n</i> = 142)
Excellent	75%	74%
Good	24%	24%
Fair/satisfactory	1%	2%
Poor/unsatisfactory	–	–

TABLE 3 Final exam results at master level.

Grades	2019 (<i>n</i> = 76)	2020 (<i>n</i> = 80)
Excellent	77%	76%
Good	21%	20%
Fair/satisfactory	2%	4%
Poor/unsatisfactory	–	–

TABLE 4 Results of *defending* the final qualifying work in the foreign languages at the bachelor level.

Grades	2019 (<i>n</i> = 132)	2020 (<i>n</i> = 139)
Excellent	81%	79%
Good	17%	18%
Fair/satisfactory	2%	3%
Poor/unsatisfactory	–	–

TABLE 5 Results of *defending* the final qualifying work in the foreign languages at the master level.

Grades	2019 (<i>n</i> = 103)	2020 (<i>n</i> = 119)
Excellent	75%	74%
Good	21%	20%
Fair/satisfactory	4%	6%
Poor/unsatisfactory	–	–

- (4) Ability to share the screen and presentation files in case of problems related to the Internet.
- (5) Use of video conference recording.

When analyzing the final assessment results at the end of the semester, the authors of the study took into account the adequate response of the university to an external challenge and the complete transition to distance learning provoked by a coronavirus. We can assert that electronic content designed to solve the above difficulties did not allow within a short time to create a full-fledged “mobile interactive student-centered online environment” (Azizi et al., 2020; Sharma et al., 2020). This triggered a high degree of caution in assessing the effectiveness of distance learning based on the results obtained during the forced experimental emergency transition to e-learning (Adnan and Anwar, 2020; Watson et al., 2020; Cahyadi et al., 2021).

The comparative analysis of the results of the final exams for bachelor’s and master’s degrees for 2019 (before the pandemic) and 2020 (in the distance format) did not reveal important changes in the grades (Tables 2–5).

The final scores obtained for the *defense* of the last qualifying works in the relevant foreign language (English, German, French, Spanish, Chinese, Korean, Arabic, and Japanese) at bachelor’s and master’s levels allowed to conclude that the forced emergency transition to a distance learning format did not affect the quality of students’ answers.

Conclusion

In evaluating the advantages and disadvantages of distance learning for law students in a foreign language in the new educational reality created by COVID-19, the authors of the study have tried to take into account all circumstances that could affect the achievement of sound conclusions. In such a short period of time, it is impossible to completely exclude the influence of external factors on the experimental results, which reduces the significance of approaches that are identical in content but different in form. The authors considered the difference in control and assessment materials and the students’ final assessment conditions. The limited time frame did not allow the authors to fully analyze the experimentally formed samples for each technology in the distance learning model. In analyzing the parameters of distance learning effectiveness, the main focus was tracking the qualitative indicators of student performance compared to the results achieved in traditional face-to-face classes. The authors of this study were aware of the fact that the data obtained had to be more focused on the analysis of prerequisites, needs, and processes than on the evaluation of outcomes (Hannila et al., 2019; Rentes et al., 2019; Beier et al., 2020; Schöbel et al., 2020). Accordingly, in this case, the efficiency level was defined as the ratio of outcomes to resources expended, considering the urgency of the tasks.

It was important to conclude the current emergency and, based on the obtained results, to organize consistent, systematic work to avoid deficits in future distance education (Carballal et al., 2019; Golant, 2019; Puttinaovarat and Horkaew, 2020; Yulia, 2020; Kuso et al., 2021). At the same time, in the course of the study, the authors were able to find sufficient evidence that the transition to distance education at the Department of Foreign Languages of the Law Institute of RUDN College was made without excessive difficulties and on time due to the sufficient development of the IT infrastructure for technical support. The necessary competencies of the department's teaching staff provided the basis for transferring the learning process to an online format to accomplish the tasks set.

The study identified the key transition phases that presented the greatest challenges for students and faculty. In this context, special attention was paid to the organizational mechanisms of the transition phase. The analysis of the problems encountered and their underlying reasons, as well as the data obtained on the effectiveness of the transition to the distance education format for foreign language teaching, contributed to the conclusion that the distance education format has become a reality in higher education. This fact makes it necessary to equip the college with modern means for e-learning and entrust IT professionals with the design of teaching materials, grade sheets, and student journals in electronic format. Retraining teaching staff and adapting educational programs to the latest innovations are no less important.

As practice has shown, the main advantage of distance learning of a foreign language is the formation of competencies in the field of information technologies among teachers and students; this provides great opportunities for access to modern electronic resources and various digital tools. Based on the obtained results, the study's authors concluded that the period of enforced distance education did not negatively affect the quality of foreign language teaching for communicative and professional purposes for college students. This period helped to introduce the best practices to new realities (Irvine and Dane, 2020; Hessburg et al., 2021; Reed et al., 2021; Rienda and Alves, 2021) and apply new high-tech educational methods under the new socioeconomic conditions created by the spread of coronavirus infection (Javaid et al., 2020; Moss and Metcalf, 2020; Abdel-Basset et al., 2021; Antonopoulou et al., 2021).

The distance education format is a given reality without which 21st-century education and the future are unimaginable. However, it cannot completely replace traditional academic education at universities. The authors support the views of scholars who have described the function of the distance education format as supplementing, broadening, and deepening traditional college education (Atabekova, 2020; Gallagher, 2020; Medela and Picon, 2020; Zakharova et al., 2020). Most students in the field of foreign languages believe that e-learning, despite its popularity and extensive use, cannot replace face-to-face interaction between teacher and student in

the classroom, cannot create an atmosphere of the traditional academic environment, and cannot replace the circle of student communication.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Ethics statement

Ethical review and approval was not required for the study on human participants in accordance with the local legislation and institutional requirements. Written informed consent from the participants was not required to participate in this study in accordance with the national legislation and institutional requirements.

Author contributions

All authors have sufficiently contributed to the study, agreed with the results and conclusion, and approved the submitted version.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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The effects of introducing language learning software during the COVID-19 pandemic

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The research aimed to investigate the impact of introducing language learning software to university students in the learning environment influenced by COVID-19. It describes the results of an experience with adding daily activities in Elevate, a free language learning application marketed as brain training software for the undergraduate English curriculum. The experiment took place at RUDN University (Moscow, Russia) in 2021 during the COVID-19 pandemic. Participants were engaged in synchronous distance and face-to-face learning, depending on their location and the current epidemiological situation. Some students alternated between online and offline environments. Research methods included a theoretical analysis of current trends in language training and gamification. Statistical data were collected and processed using the university's digital ecosystem. The research included quantitative data from the experiment and surveys, which consisted of multiple-choice, single-choice, and open-ended questions. The research sample included students from eight countries with the common European framework of reference for languages (CEFR) levels of English from B1 to C1. The research results show the effects of language learning software on students' language proficiency (P). From the results of this research, it can be concluded that schools and universities can use multi-level feedback from participants to maximize the effectiveness of language training and diversify the range of activities included in the curriculum. The results also provide the theoretical basis for e-learning software development and represent a new contribution to the literature.

KEYWORDS

language learning software, e-learning, COVID-19, gamification, pandemic lockdown

Introduction

The outbreak of the COVID-19 pandemic is an event that has significantly changed and is still affecting the learning environment on a global scale. Educational experts and researchers in various fields emphasize the unprecedented multidimensional impact of the closures on numerous aspects of teaching and learning (Subedi and Subedi, 2020; Tarman, 2020; Jaradat and Ajlouni, 2021; Salakhova et al., 2021; Soltovets et al., 2021;

Kuzembayeva et al., 2022; Uzunboyu et al., 2022). While it has been noted that educators faced the greatest challenges on a global scale during the forced transition from face-to-face to distance education in the early 2020s, scholars have also emphasized that these events are leading to long-term transformations and reconceptualization of the learning landscape (Burgess and Sievertsen, 2020), with digitization playing an unprecedentedly important role.

The current research focuses on the impact of digitization on the learning environment affected by COVID-19 lockdown. Specifically, it focuses on the potential benefits of using language learning software as an additional tool to improve the foreign language skills of Russian university students. According to data from United Nations Children's Fund (UNICEF) (Dreesen et al., 2020), the first year of the COVID-19 pandemic has highlighted the importance of the digital divide in educational institutions worldwide. This study analyzes the experience of teaching foreign languages to law students in a mixed environment (combination of distance and face-to-face teaching) at RUDN University, also known as the Peoples' Friendship University of Russia.

Throughout its history, the university has undergone numerous paradigm shifts caused by changes in the learning landscape while maintaining its focus on internationalization. The latter has been identified as one of the most important characteristics of a modern university, enabling it to gain a foothold in the global education market rather than being limited to the local market. The impact of internationalization is manifold. It allows universities to compete with foreign higher education institutions as destinations for domestic students and domestic institutions offering graduate and postgraduate programs to international students. The widespread availability of learning resources, as well as the current pandemic, has helped some scholars distinguish between "internationalization at home" and "internationalization abroad" (Mittelmeier et al., 2021).

While educators stress the importance of internationalization, they also warn of its potential negative effects and urge international universities to focus on preventing content dilution and maintaining higher standards (De Wit, 2017). One of the ways to solve this problem is to design curricula that meet the requirements of the international labor market, provide relevant content in foreign languages, and contribute to the development of professional skills (Shaidullina et al., 2015; Atabekova, 2021). To achieve this, the university attaches great importance to providing lifelong language training to its students and faculty and maintaining and improving this ability in distance education mode. The lockdown of RUDN University was initiated by the Russian Ministry of Science and Education in March 2020 (Atabekova et al., 2021). **Figure 1** below illustrates the approximate timeline of the COVID-19 response.

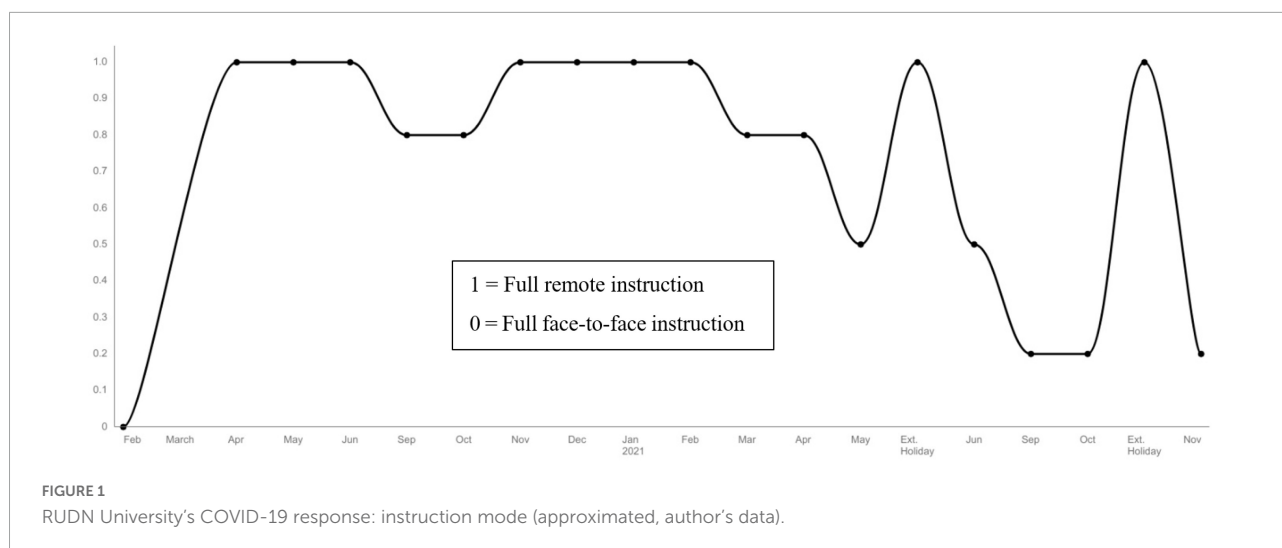
According to the above data, RUDN University was able to gradually reintroduce face-to-face classes for a select number

of students at the beginning of the 2020–2021 academic year, focusing on the adjustment of first-year students while taking the necessary precautions to prevent the further spread of COVID-19. While there was worldwide discussion of the possibility that universities could return to near-normal operations in 2021 (Sleiwah et al., 2020), the course of the pandemic prevented universities from reintroducing full face-to-face classes, many measures (including faculty vaccination) taken in Russia allowed RUDN University to begin the 2021–2022 academic year with face-to-face courses for all students living in Moscow and to change the mode of instruction as needed. As of November 2021, the situation has improved significantly compared to the same period in 2020. Nevertheless, the dynamics show the importance of considering closures in risk management (Beery, 2020) and contingency planning (Ross and DiSalvo, 2020) and implementing long-term solutions for distance education, especially in such skill-based disciplines as foreign language education.

According to the studies conducted during the pandemic (Hazaymeh, 2021; Maican and Cocoradă, 2021), foreign language instruction is particularly sensitive to changes in the mode of instruction. In addition, gamification has been found to improve students' motivation, referred to as digital natives (Butler, 2015; Kotob and Ibrahim, 2019), encouraging them to participate in concise language practice by introducing tools such as daily achievements. The Elevate application, released in 2014, is classified by its developers as a "brain training app." However, it can be argued that this categorization is not entirely accurate, as the effects of training on the brain have been questioned by the scientific community, as mentioned earlier, on cognitive abilities (Ng et al., 2020; Stojanoski et al., 2021). The analysis of the activities offered in the application shows that it can be considered a more traditional solution for language training, as it contains the categories of reading, speaking, listening, and writing. In light of this, we conducted a pilot study using the Elevate cell phone software and a set of assessment tools to determine if the skills acquired while using the application are transferable to a mixed learning environment (offline and online) and if the application can be recommended to students as an efficient additional language training tool.

Literature review

The analysis of the current trends in academic research on gamification of language training and its history, conducted using the digital databases of Google Scholar and Elsevier, demonstrates the current popularity of the topic while highlighting the importance of conducting a study that takes into account the specifics of the current situation in the global learning environment. The general trend of digitization in education, as well as the difficulties and benefits associated with it, has been outlined by scholars in several publications (Shaidullina et al., 2018; Sadeghi, 2019; Tarman et al., 2019;



Kalimullina et al., 2021; Ivanova et al., 2022). The impact of digitization on education during the pandemic has also highlighted the importance of the “digital divide”; scholars describe it as a well-known but previously underestimated phenomenon (Lai and Widmar, 2021), citing social and motivational issues, accessibility, etc. (Aboagye et al., 2021). The gap above is significant in international higher education institutions and has affected students’ overall perception of the learning process during the pandemic (Budur, 2020).

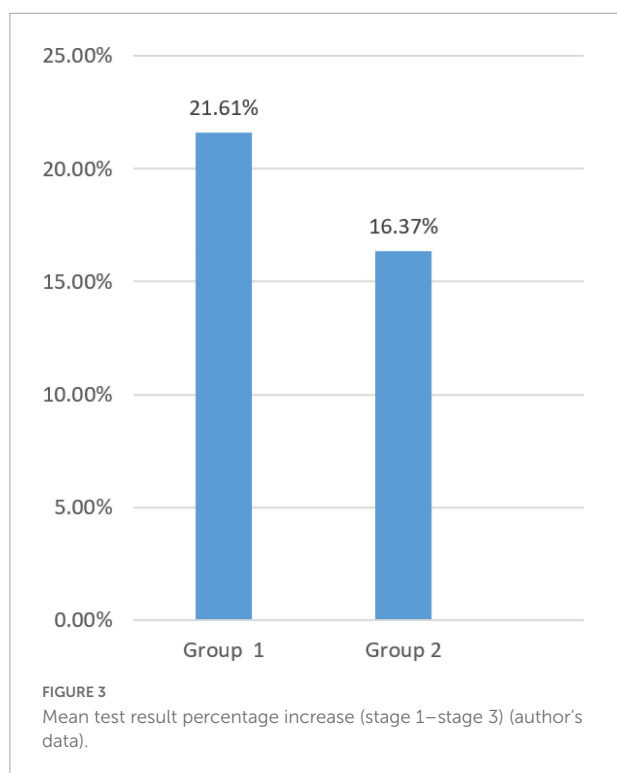
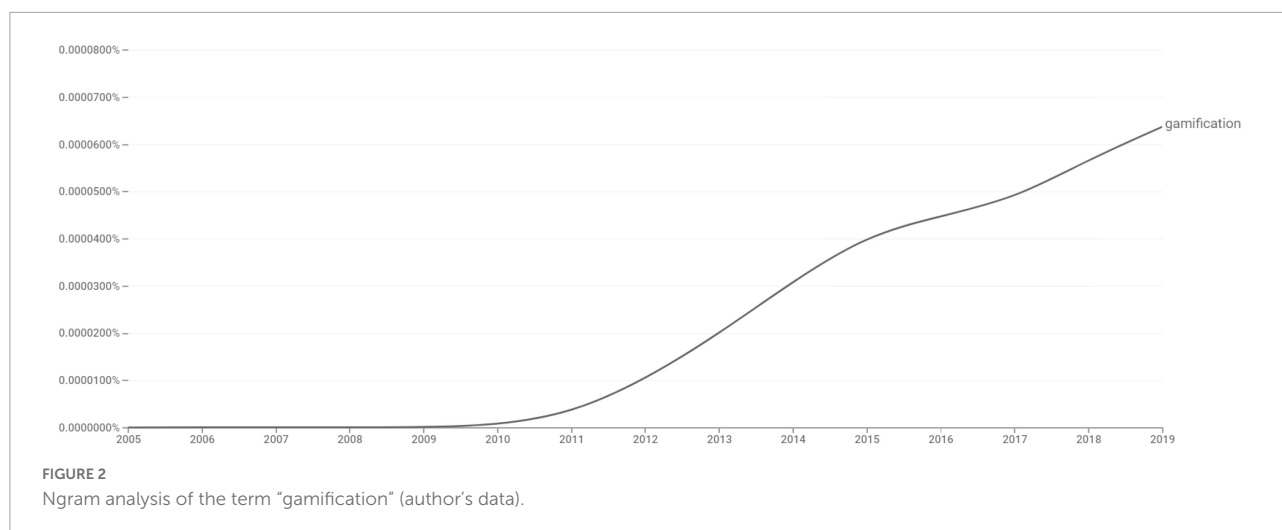
The difficulties students face have also been described in blended learning studies (Dahmash, 2020; Mahaye, 2020; Sefriani et al., 2021). Although the current generation of students (born after 1980) has been labeled digital natives (Margaryan et al., 2011; Dauzón and Izquierdo, 2020), issues related to digital literacy are still present in this generation. The events of 2020 led to a dramatic increase in the pace and depth with which digitization impacted the global learning landscape, leading some scholars to use the term “shock digitization” (Chigisheva et al., 2021). Scholars also include among the most recent trends in education the increasing popularity of technologies such as virtual reality (Volkova et al., 2020) and augmented reality (Elmqaddem, 2019). While these technologies are well-established in the universal digital landscape, their current use is new and has been shown to enhance learning through gamification (Horváth, 2018).

Scholars describe gamification as design principles, processes, and systems used to influence, engage, and motivate individuals, groups, and communities to promote behaviors and achieve desired outcomes (Huang and Soman, 2013). This process has been associated with increased student motivation (Buckley and Doyle, 2016; Alsawaier, 2018; Chapman and Rich, 2018) and productivity (Gamlo, 2019), as well as minimizing distraction and improving learning curve dynamics (Kayırmışoğlu et al., 2016). To analyze the history of the term “gamification” and its usage in the literature, we conducted

a corpus-based search using Google Ngram Viewer. The research revealed that the word “gamification” originated in the first decade of the twenty-first century. The number of mentions gradually increased from 2010 to 2015, marking its popularization and wide acceptance in the academic world, fostered by the development of technology (see Figure 2). The following graph was created using Google Ngram Viewer and the following parameters: Search term: “gamification”; Corpus: English; Case insensitive; Smoothing from 1.

The dynamics described above prove that the gamification trend is becoming increasingly popular and spread to various areas of life, including education. The current research focuses on the Elevate app’s benefits, including gamification elements such as skill-based linguistic microgames with sophisticated feedback and ranking systems, detailed real-time visualizations, daily achievements, leaderboards, high-precision time limits, etc. Studies addressing similar applications highlight the problems related to self-motivation and self-control (García Botero et al., 2019), which could prevent users from achieving high results in a psychologically isolated environment characterized by the current pandemic. In addition, researchers emphasize the importance of self-control as one of the key components of long-term success (Hidayah, 2021).

A further literature review has shown that scholars associate motivation with a positive user experience (Seppala et al., 2020), which includes many factors, including a certain level of abstraction, engaging game mechanics, and an intuitive user interface (Yunyongying, 2014). While gamification as a form of digitalization in a COVID-19 learning environment has been seen mainly as a positive phenomenon, some scholars recommend a more realistic approach (Oe et al., 2020). It is also argued that gamification leads to standardization, which may place some limits on the development of language skills (Im et al., 2019). Although Elevate is marketed as a brain training application with 500 million active users, a large-scale study of



such applications did not find significant improvement in basic cognitive skills (Stojanoski et al., 2021). The authors emphasize the presence of a placebo effect, which may indirectly and temporarily improve perceived outcomes. Therefore, we limited this study to language skills rather than more general skills.

The literature review confirms that researchers are looking into the digitization of the learning environment COVID-19 and the use of gamification tools in language teaching. However, there has been no particular focus on using gamification-based language learning applications during the current pandemic. No special attention has been paid to such studies at

Russian universities. The fact that gamified instruction requires software-based solutions with a high budget and a certain amount of time for implementation implies the need to create a common framework for curriculum designers and software developers. The present study attempts to find ways to optimize the user experience by measuring the quantitative efficiency of the software, as well as conducting a thematic analysis and a quantitative study of the feedback provided by the participants.

Research questions

The aim of the research is to determine the impact of introducing language learning software to university students in the Russian learning environment influenced by COVID-19.

To achieve the above goal, the following research questions were asked:

- (1) Does daily practice with language learning software improve university students' English proficiency?
- (2) What ways to improve the user experience of language learning software for students in the learning environment affected by COVID 19?

Materials and methods

Design

This study aims to determine the impact of implementing language learning software for university students in a learning environment dominated by COVID-19. The study included theoretical and empirical studies and involved several phases. Theoretical analysis of the literature helped determine the

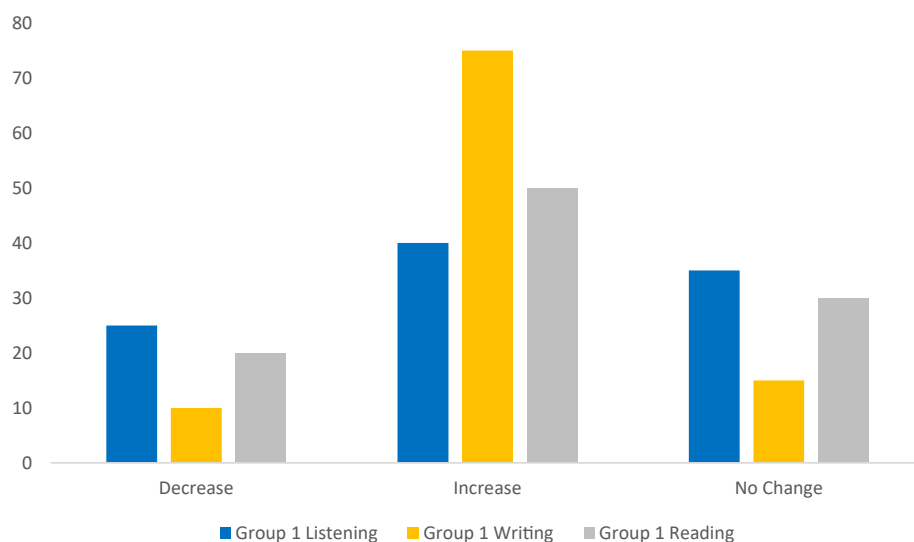


FIGURE 4
Group 1 students' test result dynamics (stage 1–stage 3) (author's data).

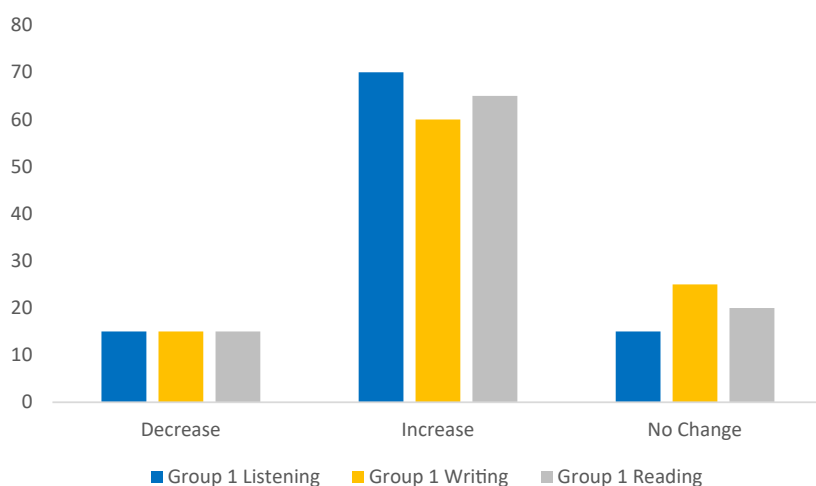


FIGURE 5
Group 2 students' test result dynamics (stage 1–stage 3) (author's data).

relevance of the study. Core research activities included empirical analysis of qualitative and quantitative data. Data were analyzed using thematic analysis and descriptive statistics in the form of a percentage.

Research sample

The sample for literature analysis included 659 papers found in Google Scholar and Elsevier digital databases from 2009 to 2021. The sample for the empirical research included a heterogeneous pool of RUDN University Law Institute students ($N = 40$) whose classes were a combination of distance and

face-to-face classes, depending on their location and individual epidemiological situation. While the majority (80%) of students were present in the classrooms and never used Microsoft Teams to join the class during the experiment, 20% switched teaching mode from distance to face-to-face and vice versa.

The pool consisted exclusively of first-year bachelor of laws (LLB) students (75%) and LLB students (25%) with limited English training at RUDN University ($t = 30$ days) to minimize potential cumulative effects from previous long-term group studies. Sixty-five percent of the students participating in the study were female. The other 35% were men. The participants' characteristics are given in [Table 1](#). Student ages ranged from 16 to 38, with a median of 17 years. Most participants were Russian

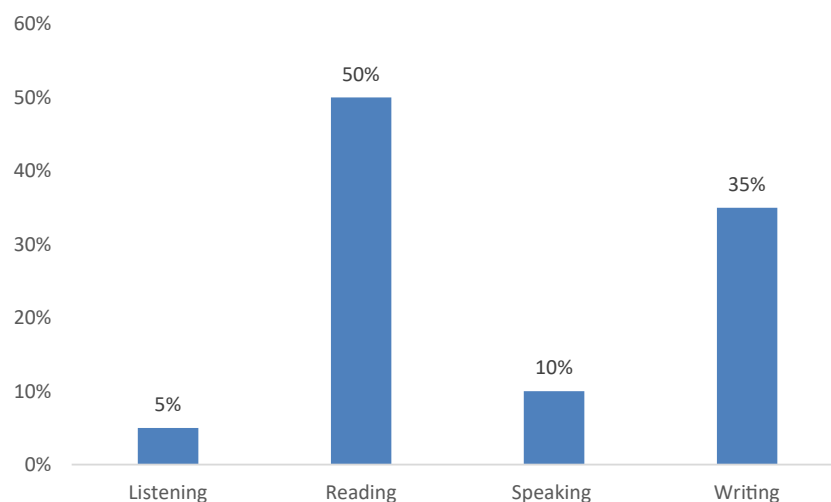


FIGURE 6

Most useful categories of Elevate language training according to group 1 (author's data).

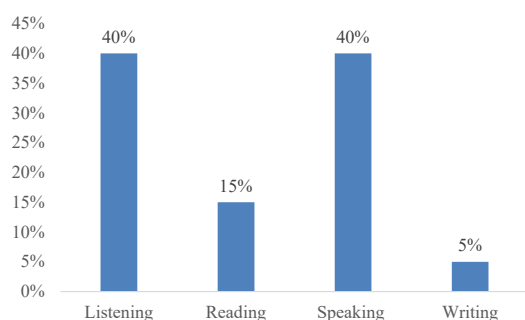


FIGURE 7

Least useful elevate language training categories according to group 1 (author's data).

(80%), but there were also students from Moldova, China, France, Uzbekistan, Latvia, Kazakhstan, the United States, and Georgia (2.5%). The level of English proficiency ranged from B1 to C1. All participants could read and understand the survey and software instructions, complete the task, and provide detailed feedback in English while sharing their user experience.

Data collection and analysis

Several data types were collected and analyzed for the research, consistent with the research objective and questions. First, the academic publications on language learning software and gamification in an environment dominated by COVID-19 were selected. The sample for the literature search included over 578 papers found in Google Scholar and Elsevier digital databases from 2009 to 2021. Ngram Viewer was used to

design the research's academic framework and follow the digitization timeline.

The empirical studies consisted of three phases. In phase 1, which began on 5 October 2021, experimental participants were randomly divided into two groups of 20 students. On day one of the experiment, both groups took a Cambridge Assessment English comprehensive test that included listening, writing, and reading tasks with predefined quantitative assessment criteria. The quantitative data obtained in Phase 1 scored each of the three skills on a 100% scale. To minimize the influence of external motivational factors, students were not warned before this or subsequent tests, nor were they given additional points. Then, group 1 was asked to download and install the free version of the Elevate application, which provided five random daily training activities to improve each skill.

In Phase 2, which lasted from 6 October 2021 to 12 November 2021, Group 1 completed daily language training in the Elevate application, tracking each of their skills on a 5,000-point scale used by the application and generating weekly reports. These quantitative results were later converted to a 100% scale. Particular attention was paid to maintaining the "streak," i.e., many consecutive days of training, to observe the relationship between the consistency of results. The quantitative statistical data obtained were processed using the software IBM SPSS Statistics. In the final phase of Phase 2 (8–12 November), Group 1 was asked to complete a Microsoft Forms survey consisting of multiple-choice, single-choice, and open-ended questions to obtain qualitative and quantitative data. The survey was hosted on RUDN University servers. It was offered in English and completed by all research participants in Group 1 with an average completion time of 16 min and 26 s; the last response was submitted on 10 November. Participants were classified as PT1–PT20 to keep their data confidential.

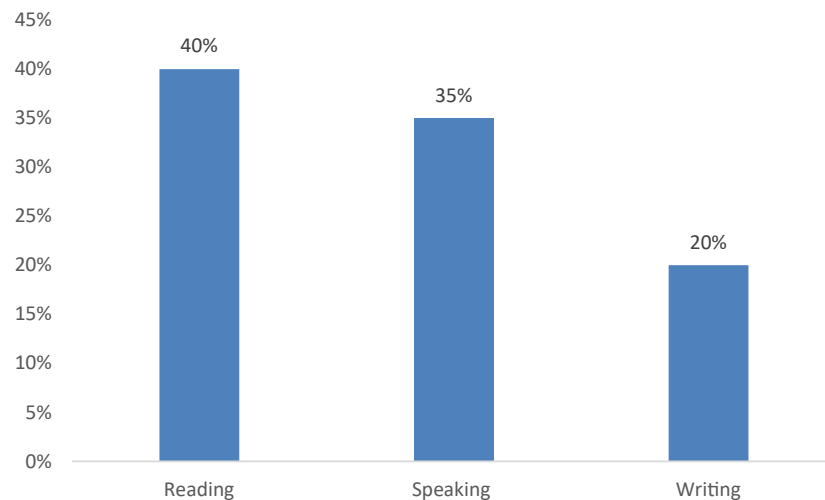


FIGURE 8

Elevate language training categories with the highest score, group 1 (author's data).

TABLE 1 Participants' characteristics (author's data).

Gender	Female	Male		
	65%	35%		
Age	Min	Max	Median	Mode
	16	38	27	17
Nationality	Russian	United States	China	Other
	80%	2.5%	2.5%	15% (listed above)

In Phase 3, which took place on 12 November 2021, Group 1 and Group 2 completed their second English test of identical complexity and structure. To maximize consistency, we ensured that participants took the test under the same conditions as in Phase 1 of the experiment. The quantitative data obtained were compared to the data sets from stages 1 and 2. Charts and tables were created based on the survey and test results and the quantitative data from the application.

Results

This section presents the results of the data analysis concerning the two research questions posed previously.

- (1) Does daily practice with language learning software improve university students' English proficiency?
- (2) What are the opportunities to improve the user experience of language learning software for students in the learning environment influenced by COVID-19?

This section also includes the author's reflections on the study's results, their applicability to the current learning environment, and suggestions for improving the user experience.

Effects of daily practice with language learning software on university students' English proficiency

The results of our literature review show that experts in digitization and gamification have a certain degree of confidence in the future of these technologies in education. Nevertheless, some question their effectiveness, especially when comparing the advertised benefits to the actual ones. The strong conflict of interest in the evaluation of the software by its publishers is often present, as corporations develop the overwhelming majority of stand-alone language learning applications while universities and non-profit organizations do not suffer due to their complexity and budget constraints (Elevate Labs LLC, San Francisco, CA, United States, for example, has raised a total of \$17 million in funding). The business model of such software typically involves a subscription or free, ad-supported version.

The conflict of interest described above is not present in our study because the author is not affiliated with Elevate Labs LLC and received no financial support; the empirical research was conducted using the free version. While the limitations of language tests in assessing language proficiency in an external setting are well-known in academia (Im et al., 2019), international tests such as international english language testing system (IELTS), test of english as a foreign language (TOEFL), and Cambridge English exams play an important role in the current

global learning landscape. They are used by employers as assessment tools and by various institutions for academic mobility.

RUDN University Law Institute recognizes its importance and includes Cambridge English exam preparation in its curricula. This fact is particularly important because foreign languages are only included in the expanded list of subjects required for admission to RUDN University Law Institute on the Unified State Examination. As a result, some first-year students may not have sufficient practice in taking language tests. As noted above, they are not exclusively related to fluency and accuracy but also require specific test-taking skills. The Elevate application is aimed at native speakers and language learners who are already fluent in English. It emphasizes the cumulative effect of daily practice and includes various writing, speaking, listening, and reading exercises to improve language skills, reasoning, and memory. It also contains a math section that was not tracked for this study, although some law students provided positive feedback.

Although we recognize the importance of speaking in assessing language skills, we decided to exclude it from the experiment for the following reasons. First, we felt it necessary to adhere to the experiment's strict quantitative requirements and avoid potential bias in scoring. Second, while the Elevate application includes the speaking section, it does not use speech recognition technology, whereas the activities in this section include writing, listening, and reading elements. Each game focused on a specific skill. These were processing improves skimming ability, transitions help users write their text more fluently, inversion, fluency, and association focus on antonyms and synonyms, punctuation, syntax, and spelling are designed to minimize the number of errors students make in the areas of the same name; expression, adjective memory, word parts, and eloquence enrich their vocabulary by introducing seldom-used lexis and idiomatic expressions and making them aware of word structure and etymology.

Each game has a precise time limit; students can only move on to the next activity if they give a certain number of correct answers within the time limit. Some games require single-choice and multiple-choice answers—in such games, guessing is severely penalized and results in failure; a similar number of games require keystrokes with autocorrect options in case the student presses an adjacent key while trying to meet the time limit. The software adapts to the user's ability and increases or decreases the difficulty level based on performance. Students are motivated by gamification elements such as the achievement scale, the leaderboard system, in-game achievements, unlocking new games after reaching a certain achievement level, etc. The leaderboards encourage them to compete with other users worldwide.

While we asked participants in Group 1 to practice daily in Elevate, we considered the potential short-term effects

of targeted training. We sought to determine whether the skills acquired while using the application were transferable to international English tests. According to the study results, conducted shortly after the start of the academic year, both groups showed an increase in the average percentage of test scores. This progress is likely due primarily to the 4–12 h of intensive English instruction in class, homework assignments, and weekly instructor feedback. The graph below shows that Group 1 showed an additional 5.24% increase in average test score percentage compared to Group 2, which did not receive training in the Elevate application (Figure 3).

However, there is a significant difference between the overall test scores in each group and the individual dynamics. The following graphs show the dynamics in each of the three tested abilities (Figure 4).

While Group 1 showed a higher increase in total score, the number of students in Group 2 whose test scores were higher in Level 3 than in Level 1 exceeds the same parameter in Group 1 in listening and reading, but not in writing. This result is particularly important because writing is the only productive skill tested in our experiment, as opposed to reading and listening, which are receptive skills. It is also the only part of the test that excludes the probability of guessing the correct answer and implies that students rely on their active skills, leading us to consider it the part of the test with a stronger and more reliable link to fluency (Figure 5).

Nevertheless, the implications described above should be considered since dynamism can also be attributed to other factors, such as test conditions. The lack of dynamics in some skills and the slightly lower performance in Stage 3 can also be attributed to the limited duration of the experiment. In addition, it should be mentioned that no particular patterns were discovered when comparing the results of students who were taught in distance education and students who were trained in face-to-face education. Changing the method of instruction also had no significant effect, which may indicate that these groups of students have already gained sufficient experience with distance learning after 20 months of pandemic-related restrictions.

Opportunities to improve the user experience with language learning software in the learning environment affected by COVID-19

Students completed the survey in Phase 2 before the final test results were available and shared with them to avoid bias in their perception of ability dynamics. The survey served several purposes. First, it was conducted to measure the effectiveness of the Elevate application and find a correlation between test scores in each category, the categories participants perceived as most useful and least useful, and the performance measured

in the application. Second, the survey aims to gather feedback that could include stand-alone gamification-based language training applications in curricula. Finally, students' negative and positive feedback may reveal various ways to improve the user experience.

The first result of the anonymous survey shows that students have an overall positive impression: They were asked to rate the Elevate application on a five-point scale, with five being the highest score and one being the lowest. Participants gave it an average rating of 4.65, with one participant rating it a 3. Participants were also asked to share their overall impression of the activities offered in the Elevate application (Figure 6). The charts below show that despite all four skill categories in the application, participants perceived literacy skills to be more prominent. This result is due to two circumstances: First, the application does not include speech recognition technology, which limits the perceived improvement in speaking in the strict sense of the term. Second, the listening activities are optional and can be skipped if users are in an environment with strong background noise or, conversely, cannot hear the audio at a good volume.

The opposite question, which asked about the least useful category in the Elevate application, produced the expected reverse results with some discrepancy: while participants ranked reading as the most productive category, it was ranked as the third least helpful category. This result could be related to the lack of clarity in describing the categories and the student's perception of the activities (Figure 7).

In addition, examination of the performance reports on the application shows that students performed best in reading, followed by speaking and writing (Figure 8). These results, except for reading, do not fully correlate with the categories in which the greatest change was observed in Group 1. In the first open-ended section of the survey, students were asked to provide feedback on the activities they remembered most. Thematic analysis shows that the most popular activities include Recall (35%), Brevity (30%), Agility (25%), and Expression (20%), all of which focus on vocabulary and aim to improve both active and passive vocabulary and paraphrasing skills. Some students provided descriptions of the activities rather than their names (the abbreviation participant (PT) stands for participants in the empirical studies):

PT 2 "I liked reading words and phrases in squares and then answering questions in the text and excluding optional parts in sentences. I liked choosing synonyms for words."

PT 10 "I liked the 'focus' game where you have to read the text quickly and then answer questions. Also, I can mention the game 'Brevity,' if I am not mistaken, where you choose the right letter. And such games as 'equivalence, processing, and clarity.'"

Such descriptions show that students are aware of the game design and understand what skills they are developing as they play; this can facilitate their skill-specific language practice.

The following comment highlights the importance and memorability of gamification elements for visual learners:

PT 8 "A game with an origami thing, a game with names, a game where you correct mistakes."

PT 18 "I love the pronunciation, reading, detail, and comma games. And the game where birds land on rooftops after you catch the right word."

In addition to the above, the analysis shows an increased number of opportunities.

Participants were also asked to provide feedback on improving the user experience.

A certain number of students requested a speech feature based on voice recognition:

PT 1 "Add speech exercises where users can record their responses."

PT 6 "Exercises can be added to improve pronunciation."

PT 9 "Add an exercise where you have to speak, pronounce words, and that's it."

Feature requests were not limited to specific skills, however. Some users suggested introducing more gamification elements:

PT 10 "Add a cooperative mode to play with friends."

Revision and memorization tools were a common theme mentioned by participants:

PT 12 "The ability to add a dictionary for unknown words and phrases."

PT 17 "More consistent comments and instructions for each game."

PT 14 "Establish an error list to help users check the essential points."

It should be noted that the activities already include a revision area, but it is not standardized, as the new features are gradually added to the game through several updates.

The free version was also felt to be too limiting:

PT 6 "More daily games available"; PT 12 More free workouts; PT 13 More tasks for the free version; PT 4 "I would like more games."

Some students believed it prevented them from progressing further:

PT 7 "I think it will only help you if you buy a full version."

While it is certain that a free version developed by a for-profit company will inevitably have some limitations, a different business model could attract new users who do not currently enjoy the full version. Even though the Elevate application offers regional pricing, its subscription model is still prohibitively expensive for most students worldwide. An ad-supported version (as provided by an increasing number of publishers) with a slightly expanded feature set could solve this problem. Although the time limit is one of Elevate's core features, some users did not see it as an opportunity for improvement and recommended that it be removed:

PT 2 "More time to complete tasks"; PT 20 "No time limit."

Many participants gave it a particularly positive overall rating:

PT 5 “I do not think this app needs to be improved.” PT 19 “It is a perfect app to learn English.” PT 11 “Everything is good.”

However, some also expressed some skepticism and criticized the practicality of the app:

PT 8 “You should use what you learn to remember it.”

PT 16 “If you have to pass an exam, this app will not help you.”

PT 18 “The app does tell me how to spell the word correctly, but I will never see the word again in the app, and rarely in the real world.”

Users also shared their opinions about the efficiency of the software and emphasized the importance of daily practice and motivation:

PT 3 Regular practice can help me improve my English skills because I can remember many new words and improve my memory; PT 13 “I believe that regular practice in this app helps you learn something new, navigate texts, perceive information faster”; PT 15 “Regular practice helps you remember what you already know and not forget what you learned through the game.” PT 4 “I believe that practicing in apps like Elevate can help improve English skills, and if you engage in it daily, you will progress faster”; PT 5 “I believe that practicing regularly and daily with Elevate helps improve my skills with the wonderful results.”

Some participants rated the immersive effect very highly:

PT 2 “I believe the such daily practice will help improve English skills because these tasks promote concentration and full immersion in English.”

In addition, participants highlighted aspects of gamification, such as the gameplay, design, and animations, and rated the application as a successful example of engaging software:

PT 8 “The design is particularly appealing.”; PT 14 “It is not a burden for me to spend 30 min every day playing interesting games while learning English.”; PT 4 “The tasks are interesting and useful.”; PT 9 This is a very unusual and effective way to learn a foreign language.

Finally, some synergy between different skills was mentioned:

PT 10 You can improve your language through games, and in addition to language, you can also improve your memory and speaking.

The results presented above could be used by software producers and developers who want to introduce and modify their best practice solutions for gamification of language training.

Discussion

This research aimed to investigate the impact of introducing language learning software to university students in the learning environment influenced by COVID-19. The research showed the effects of language learning software on students’ language

proficiency. From the results of this research, it can be concluded that schools and universities can use multi-level feedback from participants to maximize the effectiveness of language training and diversify the range of activities included in the curriculum. The results also provide the theoretical basis for e-learning software development and represent a new contribution to the literature. These results are consistent with those of [Latypova et al. \(2018\)](#), who studied the effects of the same application (Elevate) on students’ language performance and found that students in the focus group performed significantly better than students in the standard group, implying that students’ learning performance improved significantly. Their interview results also showed that students had positive attitudes toward the creative language learning methods.

In a recent study, [Ishaq et al. \(2021\)](#) found that the number of studies on mobile-based gamified applications for language learning increased from 2017 to 2021 in the literature. Similarly, the review of [Dehghanzadeh et al. \(2019\)](#), which aimed to provide an overview of studies on gamification and English as a second language in digital environments, shows that most studies have increased since 2014. These two recent review studies by [Dehghanzadeh et al. \(2019\)](#) and [Ishaq et al. \(2021\)](#) on the use of gamification methods in language teaching have also shown the increasing number and popularity of studies have led to positive outcomes in language teaching.

Our findings are very similar to those of studies indicating that students perceive gamified language teaching methods as attractive, enjoyable, and interesting ([Ketyi, 2016](#); [Medina and Hurtado, 2017](#); [Guaqueta and Castro-Garcés, 2018](#); [Homer et al., 2018](#); [Sun and Hsieh, 2018](#); [Ishaq et al., 2020a,b](#)). The reason for such an outcome might be that the gamified language teaching methods provide students with the opportunity to become psychologically engaged in the learning process ([Guaqueta and Castro-Garcés, 2018](#); [Ishaq et al., 2021](#)) and allow them to control their actions and learning process while they use gamified teaching methods in the digital environment ([Lui, 2014](#)).

The findings of this study consist of research studies in the literature that indicate gamified applications are beneficial in learning and teaching vocabulary, grammar, tenses, and words. Researchers found that gamified applications are more effective because they help to improve students’ interest and positive learning outcomes and get them excited about language learning ([Ishaq et al., 2019, 2020a](#)). Based on the findings of this study and previous research on gamification and language teaching, it is easy to conclude that there is an increasing trend of using gamified applications for all subjects at all levels of education to improve an important and significant learning outcome ([Ishaq et al., 2021](#)). In addition, in light of previous and present research, we recommend gamified applications as a teaching method for English language teaching at all levels of education.

Conclusion

The study found that introducing language learning software to university students in the learning environment influenced by COVID-19 contributed to an insignificant short-term increase in general language proficiency measurable by testing. However, these results did not generalize to the entire sample; individual assessments did not reveal any noticeable change in proficiency levels, which is consistent with scholars' views on similar applications. Analysis of the research data also showed the discrepancy between users' perceptions of each element of the learning system, their performance in the application, and actual results. This discrepancy can be attributed to a variety of the factors described above. The present study has some limitations. First, the students used the free version of the software, so they did not take full advantage of the application since no purchase was required. Second, a larger sample and more frequent long-term assessment would be needed. Finally, similar studies could be conducted outside of universities to eliminate external influences and focus solely on the progress that results from using the Elevate application.

The research findings confirm that language learners value interactive, user-centered experiences enhanced by gamification elements. While the development of stand-alone applications is still beyond most institutions' capabilities, students' willingness to use such products and services and the perceived value of their added benefits suggest a high potential for industry-specific software solutions developed for language learners. This opportunity requires further market research, given the rapid changes in education initiated during the closures triggered by COVID-19. At best, such software-based solutions can be seen as a competitive advantage that underscores a university's prestige and integration into the modern international learning landscape.

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Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Author contributions

The author confirms being the sole contributor of this work and has approved it for publication.

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Conflict of interest

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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A study of the effects of thematic language teaching on the promotion of multimedia design students' listening and speaking skills

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Previously, language teaching has been focused on the passive learning of the alphabet. In addition, the research on teaching listening and speaking skills was limited. Listening skill is the key to learning a language, and speaking is the first explicit behavior of language. In order to improve language skills which are emphasized in new curriculum guidelines, student-centered thematic language teaching is considered as valuable. Through this, the concepts of multiple intelligences and curriculum integration were re-emphasized. An experimental design was adopted in the current study. This study was conducted with the participation of 224 students from the Department of Multimedia Design in universities in the south of Taiwan. The research data were collected between September 2021 and December 2021. The implementation process took 16 weeks (a total of 48h) of thematic language teaching. The research results revealed 1. significant positive effects of thematic language teaching on listening, 2. significant positive effects of thematic language teaching on speaking skill, and 3. significant negative effects of thematic language teaching on learning anxiety. According to the results, it is expected that this study can help multimedia design students improve their listening and speaking skills as well as core language skills.

KEYWORDS

thematic language teaching, listening, speaking skill, learning anxiety, traditional teaching model

Introduction

Under the information explosion in the global village with complicated and close connections of worldwide networks, English, as a *lingua franca*, becomes an important skill to enter the global world. Solgi and Tafazoli (2018) suggested that children learn a language in a natural context by first listening to the target language, paying conscious attention to the language, and then trying to express themselves in the target language after a period of contact. Listening skill is the first challenge in the process of language learning. Sälzer and

Roczen (2018) indicated that language learning begins with communication experience. Adults stimulate children's language acquisition device through different sounds, expressions, or movements. The children are constantly encouraged to speak and communicate. In this way, they learn new vocabulary. For this reason, listening and speaking play a crucial role at the beginning of language learning. Lin and Tseng (2020) pointed out that English classes used to focus on textbooks. They also stated that the emphasis on English teaching was more on vocabulary learning, while the training of English listening and speaking skills was not in the spotlight. The teaching content or materials were disconnected from real life, and students received little language stimulation. Therefore, without rich vocabulary and the lack of authentic situations, it became more difficult to use language to communicate. Blazar (2015) suggested listening and speaking skills as the keys to learning good English. To improve the effectiveness of English learning, listening and speaking problems should be overcome. English learning strategies are classified into direct strategies and indirect strategies. According to past scholars' research and classification of language strategies, Oxford (1990) classified language learning strategies into direct and indirect strategies. The former referred to strategies directly related to learning itself and target language, including memory strategies, cognitive strategies, and compensation strategies. The latter referred to strategies to help and manage language learning, containing metacognitive strategies, affective strategies, and social strategies. Listening is the key to learning a language, and speaking is the first explicit behavior of language (Maulana et al., 2020). In order to improve language skills which are emphasized in new curriculum guidelines, student-centered thematic language teaching is considered as valuable. Through this, the concepts of multiple intelligences and curriculum integration were re-emphasized.

Thematic teaching has been hotly debated in education in recent years. This teaching method refers to a student-centered learning model, in which teachers and students discuss a learning topic that corresponds to students' learning experiences or life backgrounds. During these discussions, they combine knowledge and skills from different areas, and explore and discuss the practical application. Teachers provide scaffolding through multiple instructional activity designs and teaching strategies, and they arrange flexible learning hours and learning content to meet the learning needs of students and achieve the best of learning effectiveness (Bezerra Fagundes, 2016). In this process, the interaction between teachers and students is emphasized to provide a comprehensive learning experience. Thematic teaching emphasizes awareness, communication and interaction, and teamwork. By doing so, it aims to achieve "spontaneity, interaction, and common good" (Haryanto et al., 2018). Thematic learning allows students to explore the real world, identify problems, and continue to search for solutions. The openness of students to participate in the curriculum design allows teachers to recognize the shortcomings and promote active learning. It is expected that through interaction with teachers, students' thinking,

communication, collaboration, and interdisciplinary skills will be improved to survive in the ever-changing world (Chen and Chang, 2018). Finland, leading the education trend, proposed Grade 1–9 new curriculum guidelines in 2016, stressing on phenomenon-based learning and allowing students exploring the real world, discovering problems, and further finding out solutions. Meanwhile, students were open to participate in the curriculum design for students knowing the insufficiency, enhancing active learning, as well as cultivating the thinking and communication, collaboration, and interdisciplinary ability through the interaction with teachers in order to face the constantly updated future world (Huang, 2018). Nevertheless, most previous research on thematic teaching discussed the overall planning of instruction and the preparation of activities (Romanova, 2017). In addition, the considerations in thematic teaching design were also at the forefront (Chumdari and Budiyo, 2018; Hennessey et al., 2018). This study can fill in a gap in the literature by providing concrete evidence. In this respect, with the expectation of helping multimedia design, students improve their listening and speaking skills and develop their core language skills.

Literature review and hypothesis

Yeh and Lan (2018) stated that story-based thematic language teaching can improve students' listening comprehension, learning attitude, and language learning outcomes. Story-based thematic language teaching can promote students' interests and teacher-student interaction, improve students' listening comprehension skills, reduce learning anxiety, and promote listening motivation. Students stated that song-based thematic language teaching enabled them to learn more vocabulary and helped them to memorize vocabulary effectively. Wardani et al. (2020a) mentioned that using video-based thematic language teaching can enhance students' listening comprehension and learning attitude. When using video-based thematic language teaching, the content of the topic and the collaboration with peers should be properly adjusted according to the level of students. The students who were taught in the target language performed better in listening comprehension than the students who were taught with the traditional methods. Therefore, teaching in the target language was accepted and preferred by students. Normand and Burji (2020) pointed out the positive effect of thematic language teaching on learning attitude toward listening and on willingness to actively receive positive feedback. Thematic language teaching can reduce students' learning anxiety, but does not help much with listening. During listening comprehension development, vocabulary input affects learners' information processing in listening comprehension. Teaching in context can motivate learners to practice and promote their comprehension. Learners' interests or life experiences were also taken into consideration when selecting the learning content for listening comprehension in order to promote the development of listening comprehension and positively influence learners'

motivation and interest in listening comprehension. Accordingly, the following hypothesis was proposed in this study.

H1: Phenomenon-based English teaching method presents significant effects on English listening.

H1-0: Phenomenon-based English teaching method shows remarkably negative effects on English listening.

H1-1: Phenomenon-based English teaching method reveal notably positive effects on English listening.

Lan and Liao (2018) considered that thematic language teaching can promote learners' speaking and communication skills, learning attitude, and listening motivation. They added that it enables textbook publishers to design teaching materials that suit better to real-life communication situations. Sari et al. (2019) explained the factors that negatively affect students' speaking acquisition as the focus on reading and writing, and lack of opportunities to use the target language. In the traditional language classrooms, most speaking activities are mechanical drills and lack meaningful communication and interaction. However, the use of thematic language teaching can improve students' speaking skill, and meaningful teaching plays a primary role in the enhancement of students' speaking skill. Ahn et al. (2019) stated that the use of thematic language teaching can promote G4 students' speaking skills. In the task completion process, intensive use of language can enhance pupils' speaking skills. The learning activities in thematic language teaching can improve students' speaking performance, correctness, and emotional expression as well as promote students' learning interests. Therefore, the following hypothesis was proposed in this study.

H2: Phenomenon-based English teaching method appears significant effects on English speaking ability.

H2-0: Phenomenon-based English teaching method presents remarkably negative effects on English speaking ability.

H2-1: Phenomenon-based English teaching method shows notably positive effects on English speaking ability.

Wu (2018) indicated that thematic language teaching can promote learners' speaking and communication skills, learning attitude, and listening motivation. In addition, the publishers are forced to design teaching materials that are in line with the real communication situations and help reduce learners' learning anxiety. Wardani et al. (2020b) stated that a thematic language instruction curriculum includes diverse teaching styles and

methods to enrich students' learning experience and improve students' learning outcomes. Game elements can facilitate students' learning in thematic language teaching. Through gaming, students with different learning achievement levels can reach significant effectiveness in thematic language teaching and their learning anxiety can be reduced. Moreno Martínez et al. (2018) mentioned that thematic learning can support cognitive, affective, subject-specific, and interdisciplinary learning, in addition to developing applications for life, and solving problems. Students had positive attitudes toward thematic learning and believed that the learning content is better organized and integrated to support learning. Students felt that the selection of themes was suitable for their level and interests which, in turn, improved their listening motivation and reduced their learning anxiety. As a result, the following hypothesis was proposed in this study.

H3: Phenomenon-based English teaching method reveals significant effects on learning anxiety.

H3-0: Phenomenon-based English teaching method appears remarkably positive effects on learning anxiety.

H3-1: Phenomenon-based English teaching method reveals notably negative effects on learning anxiety.

Methodology

Measurement of research variables

Listening skill

Following Hsu's (2019) viewpoint that the focus of listening evaluation was on students' vocabulary meaning, sentence, and simple dialog comprehension. The listening comprehension was evaluated through the selective listening, completing forms, paraphrasing sentences, delivering picture information, answering questions, role-playing, or gaming.

Speaking skill

Referring to the evaluation of learners' speaking skill as proposed by Chang and Lin (2019), learners' pronunciation was evaluated through imitation and repetition of vocabulary. The recitation of sentences can help the teacher to understand learners' mastery of tone and rhythm as well as their fluency. Short answers and dialog can be used to evaluate learners' context comprehension and completion of effective communication.

Learning anxiety

Following Lin and Tseng (2020), learning anxiety was defined as the negative emotions such as discomfort, nervousness, and

worry in students' language learning process that affect their learning performance. According to the study of Horwitz et al. (1986), learning anxiety is measured as a whole.

Participants of the study

This study was conducted with the participation of 224 students from the Department of Multimedia Design in universities in the south of Taiwan. The implementation process took 16-week (a total of 48 h) of thematic language teaching. An experimental class was conducted through thematic language teaching, and the other class went on with the traditional teaching model for the one-semester experimental research. The retrieved questionnaire data were analyzed with SPSS. Analysis of variance was applied to test the hypotheses.

Instructional design

In the 16-week experimental teaching, the data collection period was between September 2021 and December 2021. The explanation of the process, grouping method, and evaluation standards was done in the first week. The course schedule with thematic language teaching was followed from the second week. Finally, a general revision was conducted in the last week. Traditional teaching model is also preceded the course explanation, grouping method, and evaluation standard. The teaching starts from the second week as scheduled, and the general review is preceded in the last week.

In this study, a 16-week thematic teaching curriculum was implemented. The basic ideas of conceptual thematic teaching with the theory of English listening and speaking skills, student orientation with teacher support, emphasis on students' learning background, and students' interests are considered as the theme. In the research process, two thematic teaching activities were implemented, which are "animals," with the theme of "animals" and "feelings," with the theme of "emotion." Two thematic teaching activities are preceded in the research process, including Animals, with "animal" as the theme, and "Feelings," with "feeling" as the theme. The teaching experiment is preceded for 16 weeks; animals is preceded in the first 8 weeks, and feelings is preceded in the last 8 weeks. Each theme was implemented for 8 weeks, with a total of 24 sessions of instructional activity. Each main theme is accompanied with small topic discussions so that students can apply learning strategies for the acquisition of listening and speaking skills with teacher support.

Both thematic teaching and English learning theory emphasize authentic problems as learning content taking into account students' interests and background knowledge. For this reason, Themes matching students' learning interests and needs are selected for the self-designed materials, with the combination of rhythms and picture book stories with high repetition (How do you feel?). Songs from YouTube and self-made teaching texts were

used in the implementation. The different learning styles which included group discussion, report, singing, and dancing were used to teach the two major themes. The "Animals" and "Feelings" themes were applied to improve students' listening and speaking skills. In this study, the traditional teaching model was implemented by the traditional model of teachers who narrate textbooks.

The teaching process includes the following steps. (1) Revealing learning theme: Students are clearly informed the learning theme and course orientation to understand the course content and be attracted the interests as much as possible. The learning theme was determined based on the researcher's investigation and observation in order to align the learning theme with the students' interests. (2) Triggering motivation: Attracting students' attention through pictures, stories, or songs to increase their motivation to learn. Through brainstorming and sharing between teachers and students, various theme-related learning materials were created organized, and classified to determine the sub-topics for discussions. (3) Getting into instructional activity: Multiple methods such as teacher lectures, class discussions, teamwork, hand painting, body movements, and presentation were used so that students can repeatedly practice listening and speaking skills while exploring the theme. (4) Evaluation and feedback: Teachers gave positive feedback on students' presentations and integrated the thematic concept into the classroom.

Quantitative test is utilized for collecting data, which are objectively and justly interpreted and analyzed for the completion.

1. Worksheet: According to the demands for the course content, different worksheets are designed to check students' listening and speaking learning conditions. The content combines thematic teaching and English listening and speaking evaluation.
2. Paper-and-pencil test and performance evaluation: In order not to have text reading become an obstacle for listening tests, the questions are presented with pictures to confirm pupils' English listening learning performance. In terms of English speaking, the self-designed speaking evaluation questions are tested one-on-one between the teacher and the student. A self-designed speaking sheet for communication and interaction in English is also used for collecting students' learning condition in speaking.

The measurement of listening comprehension and speaking skills in this study was conducted using worksheets, paper-and-pencil tests, and performance evaluation. Assessment refers to the teacher's evaluation of the students, which is coded in statistics into very good (scored 81–100), good (scored 61–80), ordinary (scored 41–60), slightly low (scored 21–40), and extremely low (scored 0–20). These are shown in Likert scale as very good 5, good 4, ordinary 3, slightly low 2, and extremely low 1. Regarding learning anxiety, students filled out the learning anxiety scale after completing the course.

TABLE 1 Difference analysis of thematic language teaching in listening.

Variable		F	P	Analysis results
Thematic Language teaching	Listening	15.341	0.000**	Thematic Language teaching (3.89) > Traditional teaching model (3.43)

** $p < 0.01$.

TABLE 2 Difference analysis of thematic language teaching and speaking skill.

variable		F	P	Analysis results
Thematic Language teaching	Speaking skill	18.556	0.000**	Thematic language teaching (3.77) > traditional teaching model (3.26)

** $p < 0.01$.

The learning anxiety scale in this study contains the following items. (1) I am not confident in speaking English in class. (2) I do not understand others' (teachers or classmates) spoken English because I am nervous. (3) I am worried that I will not speak good English in class. (4) I am worried about giving wrong answers in English class. (5) I am afraid that I cannot understand what the teacher says in English class. (6) I feel shy and uncomfortable to speak English in front of my classmates. (7) I am afraid of speaking to the teacher in English. (8) I am worried about my weak English listening skills in tests. (9) I am worried that I cannot answer the questions in English tests because I read too slow. (10) I am nervous and frustrated because I do not understand the grammar in English tests. (11) I am worried about English tests even though I am well prepared. (12) I worried about questions that I cannot answer in English tests. (13) I am stressed in English tests because of the grammar rules. (14) I feel anxious when the English teacher corrects my English at any time. (15) I worried about failing English. (16) I am worried that people will laugh at my spoken English in English class. (17) I am ashamed of not speaking English fluently in class. (18) I am worried about being scolded by the teacher for my mistakes in practicing sentence patterns on stage. (19) I am worried about being scolded for poor performance on English tests.

Data analysis method

Analysis of *t*-test was used to discuss the difference of thematic language teaching in listening and speaking skills and learning anxiety. Skaik (2015) explained that independent sample *t*-test was applicable when independent variables were two-way discrete variance and dependent variables were continuous variables. SPSS with *t*-test is therefore applied in this study to discuss the effect of phenomenon-based English teaching method on English listening, English speaking ability, and learning anxiety.

Results

Difference analysis of thematic language teaching and listening

According to the analysis of *t*-test, the effect of thematic language teaching on listening was discussed, i.e., analysis and explanation of teaching style. Thematic language teaching shows higher listening achievement than the traditional teaching model (Table 1). Therefore, it can be claimed that H1 was supported.

Difference analysis of thematic language teaching and speaking skill

The effect of thematic language teaching on speaking skill is discussed according to the analysis of *t*-test, i.e., analysis and explanation of teaching style. Table 2 shows that thematic language teaching (3.77) results in higher speaking skill achievement than the traditional teaching model (3.26). Accordingly, H2 was supported.

Difference analysis of thematic language teaching and learning anxiety

The effect of thematic language teaching on learning anxiety was analyzed with an analysis of *t*-test. Table 3 shows lower learning anxiety after thematic language teaching (3.35) than before thematic language teaching (3.81). Therefore, H3 was supported.

Discussion

In thematic language teaching, multimedia design students can explore different sub-topics under the theme (Shuqair and Dashti, 2019). Considering this, sub-topics in which students have an interest can be collected through worksheets or questionnaires, before designing curriculum. The curriculum planning, collaborative lesson preparation, and brainstorming with peers allow to include different learning activities such as group discussions, real-life operations, and challenging tasks, so that the target language can constantly be experienced in different authentic situations. Besides, collaborative development of assessment rules allows in-class learning activities to be a part of multiple assessments. In the practice of the thematic curriculum, teachers need to adjust and support teaching according to students' learning situations to increase students' exposure to language and improve their language proficiency (Lambić et al., 2021). Activities such as participation in activities at school such as reader's theater, weekly sentence formation, songs, and word recitation can be considered as examples. Practicing through activities can increase learning

TABLE 3 Difference analysis of thematic language teaching and learning anxiety.

variable		F	P	Analysis results
Thematic language teaching	Learning anxiety	28.441	0.000**	Traditional teaching model (3.81) > Thematic language teaching (3.35)

** $p < 0.01$.

opportunities and reduce language anxiety. Since thematic language teaching is an interdisciplinary teaching activity, teachers often need to collect data and look for teaching strategies to solve problems in the classroom (Cheung and Wang, 2019). In addition to reviewing teaching theories and looking for appropriate teaching strategies, they need to expand their knowledge and competencies in other fields to facilitate the teaching process. In this way, teachers can seek collaboration with colleagues to form a teacher community for communication, collaboration, and brainstorming (Strouse et al., 2018). The teachers collaboratively develop thematic curricula for thematic language teaching practice, as well as apply the curricula in other fields to maximize interest in the curriculum.

Conclusion

The research findings revealed that multimedia design students showed development after the thematic language teaching in terms of speaking skill. Sari et al. (2019) mentioned that the use of thematic teaching can improve students' speaking skill. They added that meaningful teaching activities played an important role in promoting students' speaking skill. The use of thematic teaching can improve students' oral performance, in the task completion process, and the intensive use of English can promote pupils' speaking skills (Ahn et al., 2019). Thematic language teaching includes stories, songs, and sub-topic exploration. The learning activities include dynamic and static learning, such as group discussion, mood cards, dance, category posters, and role-play, to meet the demands of multimedia design students with different learning styles. Multimedia design students learn speaking in the target language through modeling. Their models are the teachers, characters in the videos, or their peers. Various learning activities provide natural, rich, and diverse authentic vocabulary learning situations for multimedia design students' constant use of language. By so doing, they move from the mechanical speaking practice of repeating after their teachers and language learning then becomes meaningful for daily life. With thematic language teaching, multimedia design students make progress in learning listening skill. Wardani et al. (2020a) found that thematic teaching can promote students' listening comprehension and learning attitude. Students who were trained through English as a medium of instruction (EMI) presented better English listening comprehension than those who

were trained in L1. Thematic teaching revealed a positive effect on listening comprehension attitude and willingness to give positive feedback (Normand and Burji, 2020). The research results, in this study, are similar to what Wardani et al. (2020b) found in their study. They stated that thematic teaching can promote the effectiveness of the course. Employing a variety of teaching styles and methods can enrich students' learning experience. Students with distinctive learning achievement levels can be promoted remarkably through effective learning in thematic teaching which includes game elements. Immersion in context can facilitate learners' practice and comprehension of the target language vocabulary. The selection of learning content for the listening skill is mainly based on students' interests or life experiences. In this way, their listening comprehension skill was improved as well as their learning motivation and interests were positively affected. These, in turn, greatly reduced the learning anxiety (Normand and Burji, 2020). In thematic language teaching, teachers select stories that use sentences with high repetition, body movements, and role-play, to help multimedia design students' listening comprehension. Designing listening tasks with clear steps, such as taking pictures while listening to vocabulary and drawing emotional expressions while listening to sentences, can improve multimedia design students' listening comprehension. It is difficult to target multimedia design students' listening comprehension because learners' spoken and non-spoken responses provide important information for teachers' evaluation of multimedia design students' comprehension.

Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

Ethics statement

This study was reviewed and approved by the Ethics Committee of the Cheng Shiu University. Written informed consent was obtained from all participants for their participation in this study.

Author contributions

S-KY performed the data collection and data analysis and approved the submitted version of the manuscript.

Conflict of interest

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Promoting language development in physically disabled adults through sports: The content and language integrated learning method

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This study reports on the outcomes of a qualitative study which explores the perceptions of ten wheelchair basketball players of the implementation of a content and language integrated learning (CLIL) program. The participants were all members of the official wheelchair basketball team of the Sports Federation for the Disabled in North Cyprus. They were all young adults (18–35 years old) and their level of English language proficiency ranged from elementary to beginner. After a 4-month CLIL intervention period, the data were elicited through individual interviews from the participants. A qualitative analysis of the textual data revealed the themes such as improved self-image, high motivation, developed social skills, and better speaking skills in the target language. The results have a few practical implications for English such as foreign language teachers, sports coaches, and local disability committees.

KEYWORDS

psychology of education, motivation, language learning, affective factors, content and language integrated learning (CLIL)

Introduction

There has been a growing trend in education to teach subjects other than languages by adopting a foreign language as the medium of instruction. Content and language integrated learning (CLIL) has been popular lately and is viewed as an innovative method of teaching languages (Le and Nguyen, 2022). CLIL practices aim not only to improve language skills but also to enhance academic cognitive processes and intercultural understanding (Gabillon and Ailincăi, 2013). CLIL programs encompass

the integration of a subject with foreign language teaching, mainly English, which entails the cooperation between language teachers and content teachers. CLIL is welcomed worldwide as a popular approach that promotes foreign language learning. Indeed, according to Dalton-Puffer (2007), foreign language learning occurs naturally in the CLIL classroom. During CLIL methodologies, the focus is on meaning rather than form; hence, students are provided with a purpose to use the foreign language (Alexiou, 2015). Students learn a particular subject by being exposed to a foreign language through CLIL programs. The main goal of the integration of CLIL programs is to teach subject area knowledge while improving students' foreign languages.

Content and language integrated learning makes way for incidental and unplanned language learning in a natural way (Coyle et al., 2010, p. 18). CLIL has the potential to transform the dynamics of learning, making it more motivational and constructivist due to the use of real language (Pérez-Cañado, 2011). There are clashing views on the influence of CLIL on sports. While some argue that students' intrinsic motivation has a positive effect on English learning (Coral, 2010), some studies indicate that learning a foreign language could be stressful and causes anxiety (Figueras et al., 2011).

Sport has the power to unite people regardless of gender, color, and race. Sport, more than any other discipline, is a vehicle for inclusion even for the disabled individuals. The CLIL classroom also has a potential for inclusion, leveling up, and reducing inequality. In this respect, it is imperative to design studies exploring the effectiveness of teaching sports with the adoption of a foreign language *via* CLIL programs. CLIL programs focus on four competencies, namely, content, cognition, communication, and culture. The major aim of CLIL programs is to develop communicative and cognitive skills in the target language while building knowledge of the subject. Although CLIL is widely used in Europe when teaching arts, biology, chemistry, and social sciences, studies on the adoption of a CLIL approach in physical education and sports classes are not frequently cited. Overall, less CLIL research has been conducted on sports for the disabled individuals. To address this void in the literature, this study is designed with the aim of exploring the physically disabled individuals' perspectives regarding the effects of CLIL on their morale, motivation, wellbeing, and linguistic development.

Research questions

To fulfill the research aim, the following questions were posed:

1. In what ways does CLIL intervention affect wheelchair basketball players?
2. To what extent does CLIL intervention benefit wheelchair basketball players in terms of linguistic gains?

Review of literature

Language and content development is the main focus of CLIL. Students are exposed to a foreign language, while they are dealing with a variety of topics in CLIL classes. In addition, since they are exposed to two languages (one being their mother tongue and the other being a foreign or a second language), at the same time, their thinking skills in these languages develop as well. CLIL classes also enhance linguistic competence (Lasagabaster, 2008; Harrop, 2012) as students engage in meaningful interaction (Dale and Tanner, 2012). Sakellariou and Papadopoulos (2020) acknowledged the benefits of CLIL regarding language and cognitive development. Using the total physical response methods in physical education lessons, CLIL has the potential to improve students' English language comprehension (Asher, 2003). A great number of vocabulary input foster vocabulary development and knowledge during CLIL instruction (Alexiou and Stathopoulou, 2021). This, in turn, adds to the development of speaking skills (Lasagabaster, 2008).

Research conducted with tertiary students studying at the Faculty of Sports is highly satisfied with the CLIL approach in Barcelona (Figueras et al., 2011). According to Dalton-Puffer (2007), in CLIL classrooms, unlike language classrooms, students use the target language naturally, just like they use their mother tongue naturally in everyday life. Similarly, Christopher et al. (2012) delved into teaching English through sports to higher education students to find that the participants gained confidence in terms of speaking English. The reason for increased speaking skills may be the real-life situations that sports provide and the fact that both language time exposure and oral interaction are increased in such learning environments (Mateu, 2013). When using a variety of vocabulary and grammatical structures, the coach naturally provides necessary linguistic input for the participants. Research indicates favorable results toward CLIL learners (Dalton-Puffer, 2007; Lasagabaster, 2008). More specifically, these studies indicate that CLIL learners acquire the knowledge of the subject as successfully as those who study in their mother tongue. Furthermore, Lasagabaster's (2011) study found that CLIL learners even outperform students in controlled groups regarding the development of language and cognitive skills.

The main idea behind the use of CLIL is to prepare the participants for a better role in society. Learning a foreign language helps learners to understand the multicultural world, gain self-confidence, and develop linguistic achievement and self-expression. Owing to all these good qualities and life skills that CLIL provides, it has the potential to improve the lives of the disabled individuals in terms of socialization and motivation. Christopher et al. (2012) explored teaching English through sports to higher education students to find that the participants have gained confidence in terms of speaking English.

The interaction between the coach and the players develops social skills. CLIL programs can also contribute to forming

strong coach–athlete relationships. Forming effective coach–athlete relationships benefits the team by building motivation and morale. Research shows that since students are engaged in cooperative learning during CLIL, they can develop their communicative competence, social and linguistic skills, as well as interdependence (Martínez, 2011). Another advantage of CLIL is that participants develop a strong sense of achievement as they see their own progress in the target language (Dale and Tanner, 2012).

Harrop's (2012) study indicated that CLIL programs foster motivation as well as greater intercultural awareness. CLIL instruction makes way for intercultural awareness (Lasagabaster, 2008). Diab et al. (2018) argued that learning a language is inseparable from learning the culture and that the culture awareness development is facilitated by the CLIL method. Intercultural understanding, personal development, cooperation, teamwork, and social interaction are inherent in the culture. As argued by Mateu (2013), sport provides a motor content, and developing such a motor content in the CLIL classroom through a foreign language contributes to international understanding since the foreign language sets the context of the content in a different culture. According to Harrop (2012), even learning a foreign language is part of the intercultural learning process and this intercultural awareness has the potential to change students' outlook.

Methods

This study focused on wheelchair basketball players' perceptions regarding CLIL instruction. Considering the aim of the study to explore the physically disabled young adults' perspectives regarding the effects of CLIL on their morale, motivation, wellbeing, and linguistic development, a qualitative research method was chosen. As argued by Halcomb and Davidson (2006), qualitative research methods focus on the exploration of perceptions, meanings, beliefs, experiences, and feelings.

Subjects

The sample was composed of 10 physically disabled wheelchair basketball players. They were all young adults (18–35 years old). Their level of English language proficiency ranged from elementary to beginner. All of them were male.

Context

The Sports Federation for the Disabled in north Cyprus was established in 1996 with the mission of introducing sports to all disabled citizens of north Cyprus and to equip them with a new

outlook on life. There is only one official wheelchair basketball club that is a member of the federation. There is also another club but it is not a member of the federation. Only the official club's players took part in this study. The official wheelchair basketball club competes with those in Turkey and once they participated in a tournament in Italy as a Turkish team.

Following an ethical approval granted by a higher education institution in north Cyprus, the authorities of the Sports Federation for the Disabled in north Cyprus were contacted and a meeting was arranged with the players and the coach. During the meeting, the aim of the study was clarified and they were briefed about the nature of the intervention. What they needed to do during the training sessions was explained in detail. More specifically, they were told that they would keep going with their usual training sessions with their coach and that the only difference would be that they would be accompanied by an English-speaking assistant coach. It was explained to them that there was no expected harm from the study but they could benefit by learning or practicing English so that they would be able to understand basketball terminology during the tournaments in Europe. In fact, sports teams in north Cyprus cannot participate in European cups due to the embargo, but, especially, teams such as the disabled basketball team can compete if they were a Turkish team. They were also informed that participation was on a voluntary basis and that if they consented, they would be interviewed at the end of a 4-month period.

Procedure

This study partially applies Mateu's (2013) model. Learning outcomes were identified as “what students should know,” “be able to do,” and “be aware of at the end of the unit” (Mateu, 2013). More specifically, they should know the basic commands like run, catch, and throw, “be able to do” refers to understanding commands, and “be aware of at the end of the unit” refers to the awareness of communicating in English. The participants were expected to acquire basketball terminology, such as violation, turnover, traveling, time out, three-point line, technical foul, substitute, slam dunk, shot clock, shoot, set shot, referees, rebound position, personal foul, overtime, overhead pass, no-look pass, MVP, lay-up, jump shot, hoop, guarding, game clock, free-throw, foul, exceed, drive, dribble, draft, double-dribbling, chest pass, bounce pass, bounce, block, basket, backboard, and assist. The language structures were identified as *Bounce the ball, we won, throw a chest pass, run forward, don't exceed the time limit, Do you have any fouls?, I have two fouls, we lost possession of the ball, the coach gets a technical foul, don't violate the rules, let's play, and it's my mistake*. Language functions were giving commands, asking and answering questions, giving opinions, and explaining. As Coyle

et al. (2010) argued, “Developing a repertoire of speech acts which relate to the content, such as describing, evaluating, and drawing conclusions, is essential for tasks to be carried out effectively.”

The training sessions were designed to pay attention to content, communication, cognition, and culture developed by Coyle et al. (2010). In this respect, developing content knowledge, and language skills as well as communication within the content were paid special attention. During the introductory phase, the coach defined the content to be taught to the participants in Turkish and then using Total Physical Response (TPR), the assistant coach first modeled the move while naming the move in English and then asked them to do so while repeating it after him. Thus, team members construct their knowledge by active participation. The whole procedure lasted for 4 months, and the training sessions were held three times a week.

Data collection

To evaluate the effectiveness of the CLIL experience, semi-structured interviews were conducted with each participant. Creswell (2012) noted that semi-structured interviews permit the participants to describe the details for personal information, and the interviewer has good control over the information received. Open-ended questions, such as “How would you describe this experience?, How did you benefit from this experience?, What challenges have you experienced?” were asked. The interviews took around 45 min and were recorded, transcribed, and translated into English. For ethical issues, all participants took place in the study with pseudonyms.

Data analysis

Once the interview data were transcribed, a preliminary content analysis was conducted following the Halcomb and Davidson's (2006) model. A series of categories and subcategories were identified. The data were coded separately by each researcher and then standardization sessions were conducted following a detailed discussion until an agreement concerning the subcategories was reached. Then, the themes were elicited.

Findings

The analysis of the data revealed four themes, namely, improved self-image, high motivation, developed social skills, and better speaking skills. The findings were revealed to be discussed by theme:

Improved self-image

Overall, all participants reported positive perceptions of the CLIL experience in terms of self-image. Ali stated,

I never thought it would be possible for me to be a basketball player or to play in Turkey or abroad. I was tired of everything and I did not have anything to do. I lost my purpose in life and every day was the same. I didn't even want to get up when I woke up. this was what life was like before I started playing basketball. It was really hard first and then with the help of the coach we got better and better each day and now I am also learning English through Basketball. It is something different. . . the assistant coach was really fun so he helped us a lot. I told him several times that I can't talk . . .he said easy easy. Although I learnt little English at school I couldn't speak or understand any word other than yes and no but in time I learnt at least some words. To manage something is really good, especially for the likes of me. One feels valuable.

Similarly, Osman acknowledged a better self-image,

I think I'm getting better and better every day at basketball. At first it was awful for me because I have never played any sports when I was a child. Being a basketball player was like a dream to me even now I can't believe that I turned into a basketball player. Although I am still trying hard I know that if I work hard I can manage something. Learning English was fun and I enjoyed it with the assistant coach. He is a nice person. I did not speak English after I left school and I thought I forgot. I will study English more because I will need it abroad. Having a purpose made me a better person. My parents objected my playing basketball first but now they encourage me to attend the trainings and they come to watch my games. My boring life changed.

Arin responded,

I feel so good about this experience... obviously it's added to my life ...it's added to me because playing basketball gives me the feeling of achieving something in life because I was like nobody. I am a basketball player now. I didn't achieve anything and I have never been successful in my life in anything but to be able to play basketball to learn English makes me feel like other normal people. Seeing that I can play basketball and I can speak English makes me believe that I can do the things that I'd like to do in life so this gives me the feeling that anything is possible also for me. I feel stronger.

Kemal also expressed improved self-esteem,

I really liked speaking English after a very long time. Learning English brings something else to our training sessions, a good change. We also enjoyed ourselves and I did not feel shy because the assistant coach helped us a lot. He is a very nice guy, he never got tired and he repeated each word several times until we got it. I like English and especially learning English words for basketball was very useful for me. That I can play basketball and learning English changed my mood and I started to believe in myself.

High motivation

The second theme that emerged was high motivation. All participants stated that the CLIL experience was very useful and enjoyable. Burak replied,

I enjoyed myself during the training with the assistant coach. He made learning English fun. A different experience from the English class at school, we never got bored.

Sinan commented,

I couldn't wait for the next training session. We all had fun, we laughed a lot at the same time we learnt a lot of words, English words, while playing basketball.

Ali added,

I wish we had such fun English classes at school because if we had learnt English that way I would have been much better at English now. You know at school everything is very serious, you have exams. Now we learn English without any exams and we learn it in a relaxed platform. That is good because you learn it without memorizing, just naturally. That is enticing.

Mert said,

I think it's a very interesting idea to use English when teaching basketball because it makes it more enjoyable and fun and interesting. I was looking forward to my next training session. I must also give credit to the assistant coach who is a very nice person.

Developed social skills

Wheelchair basketball players benefit from basketball instruction since basketball like any other competitive sport is a valuable team sport, which makes way for collaboration

and group work activities. Collaboration and cooperation increase the coach–player and player–player interactions. Most participants mentioned the importance of socialization during the interviews. Saner reported,

We are all friends with my team mates. We are like a family now. Our parents made friends too because they all come to watch us during the games. They all met so we are a very big family now. I always feel their support.

Sean stated,

Sometimes they invite us as a team for certain organizations. We meet new people and make friends. We also receive invitations from Turkey. We met other wheelchair basketball players in Turkey.

Ahmet told,

People come to watch the games and meet us afterward, which makes me proud.

As reported by Kemal,

My life is better now because I can meet my friends during the day. I attend my training sessions and I learn English so I have things to do, which are very meaningful to me.

Mert commented,

When you do not have anything to do, every day is the same. For people with disabilities there is not much to do in here. Basketball gave my life back to me. I do not want to sit at home anymore. I can mix with them.

Better speaking skills

The wheelchair basketball players had positive perceptions of CLIL, and they highlighted that their English language development was enhanced. Most of them reported that such training sessions developed English and gave them the opportunity to practice English during training sessions. Osman stated,

I was not really good at English at school so at first I was not sure about myself. The assistant coach was very patient with me but 1 or 2 weeks later I've got used to it. Besides he uses some words very frequently like good man nice shot. I just learnt basic words naturally.

Burak told,

These 4 months were really useful for me to develop my English. We learnt simple English, every day English, and

spoken English only. You do not need to know perfect English to communicate with people. Even in Turkish we use a limited number of words.

Discussion

One of the major results of this study was that the CLIL experience resulted in improvements in the wheelchair basketball players' feelings about themselves, noticing that they could also achieve something when given an opportunity made them proud. Despite the fact that some of them believed they could never learn English, they could at least understand and perform the given commands after 4 months of exposure to English, which made them hopeful about themselves. This finding went in line with that of Dale and Tanner (2012) that CLIL learners developed a strong sense of achievement when they saw their own progress in the target language.

Another result of the study was that all participants were highly motivated. Motivation plays a great role in the learning process (Subramaniam and Silverman, 2007). The wheelchair basketball players stated during the interviews that motivation was high during their CLIL experience. They acknowledged the role of learning English and the assistant coach in their motivation. This finding went in line with that of Perlman (2015) that different forms of teacher instruction had a substantial influence on students' motivational responses. This finding corroborated that of other studies (Figueras et al., 2011; Harrop, 2012; Zindler, 2013) that introducing a foreign/second language could have a positive influence on increasing motivation.

Furthermore, the results indicated that through the cooperative and collaborative nature of basketball, social interaction was fostered. This finding went in line with previous studies (Coral and Lleixà, 2016) that emphasized the important role of the language. Through cooperative and collaborative group work, the participants had to engage in meaningful interaction with their peers, which increased language use as well as social participation. The finding that CLIL developed social skills corroborated that of Martínez (2011) that cooperative learning inherent in CLIL made way for the development of social skills.

Finally, it was found that CLIL benefited the participants in terms of linguistic gains. That the participants reported developed linguistic skills could be acknowledged by the fact that CLIL provided real-life environments, making way for language development. This finding supported Massler (2012) that CLIL learners could use the skills to learn a foreign language in real-life situations. Besides, all the participants liked the assistant coach because he provided an enjoyable

learning environment for them. They were free to make mistakes and this relaxed and informal environment could have fostered more interaction in the target language. This finding supported Harrop (2012), Lasagabaster (2008), Dale and Tanner (2012), and Sakellariou and Papadopoulos (2020) that CLIL fostered linguistic development. It was also found that the participants were more confident in terms of speaking English. This finding corroborated that of Christopher et al. (2012) that CLIL contributed to confidence regarding speaking in the target language. Hawamdeh and Soykan (2021) also underlined that international students of the English language need an inclusive learning environment to study a foreign language. CLIL can enable this kind of an environment, and as Fazio and Isidori (2021) noted recently, technological tools provide effective aid and allow to devote more time to language learning. According to them, in accordance with the findings of our study, CLIL classes and language learning objectives are believed to be blended with PE-specific vocabulary and objectives to communicate subject knowledge (Fazio and Isidori, 2021).

Limitations

One of the limitations of this study is that the literature on the topic of this study indicates less research. Although there are a number of CLIL studies in primary and secondary school physical education classes, there is a lack of CLIL studies in amateur or professional sports teams. In addition, there is a scarcity of CLIL studies conducted with disabled individuals. Due to this scarcity, the discussion of the findings is carried out by referring to those conducted in physical education classes. Another limitation is that this study is designed as a small-scale study. For this reason, the sample size is not large enough to make generalizations. Other limitation is that due to the descriptive nature of the study, this study does not attempt to assess the linguistic development of the participants as it is beyond the scope. Further research can employ a pre-test-post-tense measurement of linguistic development in the target language.

Conclusion

Disabled individuals experience more difficulties than healthy people in their lives. This study evaluated the effects of the CLIL program on motivation, morale, and wellbeing by integrating English instruction into the training of wheelchair basketball players. The results indicated that CLIL benefited the disabled individuals in terms of self-image, motivation, social skills, and speaking skills in the target language. CLIL has been frequently used worldwide as an effective method of teaching

languages by incorporating foreign languages into a number of contents. As students are required to learn both subject area knowledge and foreign languages simultaneously, CLIL makes way for a more natural way to learn a foreign language. The application of CLIL to contents like physical education and sports is scarce, which calls for a need for further research.

Data availability statement

The datasets presented in this study can be found in online repositories. The names of the repository/repositories and accession number(s) can be found in the article/supplementary material.

Ethics statement

The studies involving human participants were reviewed and approved by the Ethical Committee Board of Near East University. The patients/participants provided their written informed consent to participate in this study.

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Author contributions

All authors listed have made a substantial, direct, and intellectual contribution to the work, and approved it for publication.

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Impact of instruction based on movie and TV series clips on EFL learners' pragmatic competence: Speech acts in focus

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This study attempts to investigate the role of movie and TV series clips in enhancing EFL learners' pragmatic competence by utilizing an experimental design. The sample of the study was 42 students from the English language department at Cihan University-Duhok, Iraq. The experiment lasted one academic semester. The participants' English language proficiency, as determined by an IELTS test sample, was intermediate, and then they were randomly split into two groups, namely experimental and control. Before and after the treatment, a Written Discourse Completion Test (WDCT) served as a pre-and post-test given to the two groups to assess statistically significant differences between them. The experimental group received direct instruction on request and suggestion speech acts via the presentation of the carefully chosen movie and TV series clips. In contrast, the control group was exposed to a minimal amount of pragmatics through printed texts. The findings demonstrated that the experimental group outperformed the control group. More precisely, the findings revealed that movie and TV series clips had a significant influence on learners' production of requests and suggestions. Considering the above findings, the researchers propose EFL teachers apply movie and TV series clips to improve their Students' pragmatic competence in class.

KEYWORDS

pragmatics, pragmatic competence, speech acts, movies and TV series, pragmatic instruction

Introduction

The emergence of communicative competence models (i.e., grammatical, sociolinguistic, discourse, and strategic competence) (Canale and Swain, 1980) marked a transformation in the perception of foreign or second language teaching and learning from merely mastering grammatical rules and memorizing vocabulary to learning how to use these elements functionally and socially. Thenceforth, pragmatic competence, which is defined as the ability to use the language appropriately and comprehend meaning in social situations, has emerged as a critical constituent of foreign or second language competency, different from the communicative competence models. More importantly, pragmatic teaching has seen a boost in popularity since pragmatics has started to acquire overt acknowledgment in communicative competence frameworks. This is recently proven by the fact that a substantial amount of literature including books and research has been published on the teaching of pragmatic competence and performance of different types of speech acts. Bachman and Palmer (1996) stress the importance of pragmatic competence by stating that it is the primary determinant of an individual's overall language proficiency. Moreover, Kasper (1997) argues that foreign language instruction based on the coursebooks may help develop learners' metalinguistic awareness but cannot improve their metapragmatic knowledge.

The ultimate goal of teaching a foreign or second language is to help learners communicate in a social context appropriately (Abdullah and Omar, 2020). Learners' comprehension and production of speech acts can be negatively affected, even if they are fluent in the language and have excellent grammatical competency without receiving any instruction (Bardovi-Harlig and Mahan-Taylor, 2003; Alsuhaibani, 2022). In an environment where English is taught as a foreign language, the necessity for pragmatic teaching is necessary since learners are solely presented with the target language in classrooms. Rose and Kasper (2001), Yoshimi and Wang (2007), Alcón Soler and Martínez-Flor (2008), and Taguchi (2009) are examples of those authors who edited volumes based on empirical research that depicts instructional approaches and acquisition of pragmatic features in the classroom. Others are monograph-length studies, mentioning only the most recent research, that chronicle the process of pragmatic progress of language learners in institutional contexts (Abrams, 2014; Birjandi and Derakhshan, 2014; Alsmari, 2020; Alsuhaibani, 2022; Ziashahabi et al., 2020). All these publications underline the significance of teaching pragmatic competence and subsequently encourage EFL teachers to consider the most effective method to improve learners' pragmatic competence. Therefore, the present study explores the impact of a method that is based on the use of movie and TV series clips on improving EFL learners' pragmatic competence in the production of requests and suggestions.

More precisely, the study's objective is to address the following questions:

1. Does the use of movie and TV series clips help Kurdish EFL learners significantly enhance their pragmatic competence in making requests?
2. Does the use of movie and TV series clips help Kurdish EFL learners significantly enhance their pragmatic competence in making suggestions?

Literature review

Pragmatic competence

Although the majority of communicative competence models place a premium on the significance of pragmatic competence for performing successful interactions in a foreign or second language, it is a perplexing concept that has been hotly contested by a diverse range of professionals because of its connections to multiple different fields, including linguistics, sociolinguistics, psycholinguistics, and even cognition. Thus, there has been no wide agreement on defining the term pragmatics up to this point. Morris (1938) definition of pragmatics as "the discipline of the relations of signs to interpreters" was marked a revolutionary step. Consequently, Leech (1983) and Thomas (1983) expanded the notion of pragmatic competence by classifying it into two distinct categories: pragmalinguistic competence and sociopragmatic competence (as indicated before in the introductory section). According to LoCastro (2003), pragmatic competence is described as the ability to evaluate and interpret the meaning generated by the speaker and hearer via their joint acts. These acts involve both linguistic and non-linguistic signals and occur within the framework of socioculturally organized activities. It is more accurately defined by Yule (2017) as the meaning conveyed by a speaker or writer and perceived by a listener or reader. The most contemporary definition of pragmatic competence is provided by Ziashahabi et al. (2020), who indicate that pragmatics is a branch of linguistics concerned with the study of how individuals use language to communicate in a variety of social and cultural situations.

Speech acts

Speech act theory is a branch of pragmatics that examines how words can be used to perform acts in addition to presenting the information. Austin (1975), in his book "How to Do Things With Words," established the notion of speech act, which was further elaborated by J.R. Searle. The formation of speech acts is a tripartite process denoted by the terms

locutionary, illocutionary, and perlocutionary. Locutionary act refers to “the utterance of a sentence with determinate sense and reference” (Levinson, 1983, p. 236). Any speech act activates certain spoken, syntactic, and semantic features of language to effectively achieve an illocutionary act that is the outcome of the articulated locutionary act’s real meaning. If the speaker says “Stop making that noise,” he or she is using a directive speech act that comprises certain phonological, syntactic, and semantic aspects to trigger an illocutionary act of warning to the listener, informing him or her not to keep making the unpleasant sounds. On the other hand, perlocutionary actions are distinct from both locutionary and illocutionary acts in that they pertain to the impact of an utterance act on the listener. Put it more simply, perlocution is concerned with how an act’s ramifications are affected by different illocutionary forces like convincing, acknowledging, cautioning, warning, and motivating.

According to Searle in Levinson (1983), there are five types of speech acts such as representatives, directive, commissive, expressive, and declaration. Yule (1996) provides an in-depth explanation of each of these speech acts. To begin, representative speech acts are those in which the speaker displays their belief in the truth or falsity of something. Propositions of fact, assertions, conclusions, and descriptions. For instance, when someone utters “The earth is flat,” the speaker expresses his or her views about the planet. He or she believes in the flattening of the earth. The speaker portrays the world in the way he or she perceives it to be. Directives are the types of speech acts used by speakers to compel others to perform something. They communicate the speaker’s meaning. They are commands, orders, requests, and suggestions that might be positive or negative. For example, when a speaker asks someone “Could you lend me a pen, please?”. Here the speaker is requesting an action from the listener. Commissives are those types of speech acts in which speakers express their commitment to perform an action in the future. They convey the speaker’s intention. They are promises, threats, refusals, and pledges. For instance, when a speaker says “I’ll be back,” he or she is promising the listener that he or she will return to them. Those types of speech acts that express how the speaker feels are known as expressives. They may represent psychological emotions such as pleasure, pain, likes, hates, joy, or sadness, and they can be expressed in many ways. Just as in this phrase “I’m really sorry,” this may be provoked by either the speaker or the hearer, but they are related to the speaker’s experience. Lastly, some other types of speech acts are referred to as declarations which, when delivered, have the potential to alter the destiny and world. For instance, when a priest declares, “I now pronounce you husband and wife,” the speaker must have a certain institutional position and in a particular setting to be able to properly conduct a proclamation.

The most common method of assessing learners’ pragmatic skills has been to examine their performance on speech acts, particularly when contrasted to that of native speakers. Using the appropriate speech act at the appropriate time and in the

appropriate manner is believed to be part of a native speaker’s pragmatic competence, an instinctive knowledge that non-native speakers lack. Today, there seems to be an abundance of details and literature on how speakers realize the speech acts in certain settings, as well as predictions for how non-native speakers may deviate from these patterns in their speech productions. Unfortunately, the strategies that are used to construct these speech act utterances are mostly absent from the documentation on the subject (Cohen and Olshtain, 1993).

Teaching pragmatics

When children learn their first language, it is often believed that they get explicit teaching from their parents. The parents do not fix their grammatical faults on a regular basis, nor do they teach them how to construct a proper sentence or how to pronounce a specific word. Over time, they will gain more confidence and the ability to produce semantically and syntactically accurate phrases and sentences (Alsuhaibani, 2022). When it comes to pragmatic mistakes, the parents are immediately engaged in rectifying the mistakes and teaching them how to use the language in a social context (Schmidt, 1993; Eun and Tadayoushi, 2006). Bardovi-Harlig (2001) and Kasper (2001) confirm the vast majority of language learners do not seem to learn the second language’s pragmatic elements on their initiative. Therefore, communicative competence methodologies have shifted the focus of foreign or second language teaching away from rote memorization of grammatical structures toward the pragmatic and social application of these formulas.

More importantly, the critical role of pragmatic knowledge in communicative competence has resulted in a substantial body of literature devoted to teaching foreign or second language pragmatics, especially speech acts. For the study, the researchers reviewed the literature on the influence of instruction on language learners’ pragmatic competence. Promisingly, meta-analysis and reviews of studies have shown that pragmatic instruction is important in developing learners’ pragmatic abilities (Rajabi and Farahian, 2013). Particularly, multiple classroom-based experimental research on learners’ pragmatic development has demonstrated that instruction intervention has a significant effect on learners’ pragmatic competence, even more so when learners are residing in a country where learners are merely exposed to the target language (Long, 1996; Eun and Tadayoushi, 2006; Belz, 2007; Takahashi, 2010a,b; Taguchi, 2015).

Furthermore, the researchers evaluated the literature on the most effective method of instruction to teach pragmatics in the classroom. There are two types of instruction, namely explicit and implicit which have been the central focus of arguments and research among scholars. However, there is a general consensus that explicit instruction is more effective

than implicit instruction for teaching pragmatics, [Alcón-Soler \(2005\)](#) and [Martinez-Flor \(2005\)](#) showed the advantages of kinds of instructions in their study. On the other hand, [Fazilatfar and Cheraghi \(2013\)](#) study involved Iranian EFL university students and focused on investigating the effect of instruction on learners' ability to produce compliments and comparing explicit instruction to implicit one. The participants were divided into three groups (explicit, implicit, and control). The explicit group received instruction using explicit feedback on the production of appropriate compliments, whereas the implicit group was given instruction based on implicit feedback. The findings of the study indicated that development occurred in both explicit and implicit groups, but the explicit group had a better performance than the implicit group.

Analogous results are reported in [Ziashahabi et al. \(2020\)](#). In their study, both the explicit and implicit groups benefit from instruction focused on producing speech acts and pragmatic competence improvement. The explicit group, on the other hand, outperformed the implicit group. As a result, explicit instruction was given precedence over implicit instruction as the learners who were exposed to the explicit instruction yielded a considerable development of pragmatic competence. [Takahashi \(2001\)](#) used a quasi-experimental (pre-test/post-test) design to examine the effect of four input enhancement conditions (explicit teaching, native speaker request comparison, native and non-native speaker request comparison, and reading comprehension) on the improvement of request strategies in Japanese EFL learners. The finding revealed that the explicit group performed better than the other three groups in terms of their utilization of the four request strategies. [House \(1996\)](#), [Gaily \(2014\)](#), and [Li and Zhoumin \(2019\)](#) found similar results in their study, stating that pragmatics cannot be efficiently learned without a pedagogical intervention.

As indicated above, researchers are becoming increasingly interested in examining the effects of the pedagogical intervention on second language learners' pragmatic improvement in EFL/ESL settings. As [Rose \(2005\)](#) points out, the Noticing Hypothesis ([Schmidt, 1990](#)) justifies investigating the influence of teaching on learners' pragmatic development. According to Schmidt, simple exposure to the target language is insufficient because there are pragmatic functions and pertinent situational variables many of which are taken for granted by learners and thus less likely to be noticed even after exposure for a lengthy amount of time. In contrast to [Krashen \(1985\)](#), who asserts that unconscious learning activities are superior to conscious learning activities and accountable for the lion's share of second language output. Other scholars specialized in second language acquisition, such as [Ellis \(2008\)](#) and [Schmidt \(2012\)](#), claim that highlighting specific forms and directing learners' notice to them may aid learners in language learning development. On the other hand, [Rose \(1994\)](#) emphasized the need for pragmatic consciousness-raising in pragmatic instruction. [Abolfathi and Abdullah \(2015\)](#)

employed a pre-and post-test design to explore the effect of pragmatic consciousness-raising activities on Iranian EFL learners' immediate and delayed execution of suggestions. For 8 weeks, the experimental group was subjected to pragmatic consciousness-raising treatment focused on the formulation of suggestions. The results showed that metapragmatic consciousness-raising significantly increased learners' pragmatic performance and diversity of form-strategy application. [Halenko and Jones \(2011\)](#) also discovered that pragmatic awareness-raising had a positive influence on learners' production of requests.

Another dimension of pragmatic instruction that should be taken into account by EFL teachers is the materials used in the classroom. Materials need to meet learners' levels, needs, and interests, otherwise, they will get bored easily and reflect negatively on their performance. This is why EFL learners usually avoid studying a textbook. On the other hand, many EFL teachers put all blame on the textbook for lack of authenticity. Therefore, they recommend substituting textbooks with authentic materials such as movies, TV series, newspapers, magazines, etc., produced by native speakers for non-educational purposes ([Nunan, 1988](#); [Omar and Mekael, 2020](#)). The primary objective of incorporating genuine resources into the classroom is to expose learners to as much actual language as necessary. According to [Genhard \(1996\)](#), authentic materials are essential for contextualizing language acquisition. Numerous studies have been undertaken on the influence of real materials on second or foreign language acquisition, but to the best of the researchers' knowledge, only one study, as yet, has examined the effect of authentic materials on enhancing EFL learners' pragmatic competence. This study was conducted by [Abbasian et al. \(2016\)](#) who used a quasi-experimental design. 60 EFL Iranian learners participated in the study. They were divided into two groups (experimental and control). The experimental group was exposed to authentic materials. The treatment consisted of 16 sessions of 90 min each. While the control group received standard pedagogical materials. The findings of the study found that the experimental group outperformed the control group. In other words, authentic materials had a great impact on developing learners' pragmatic competence.

Teaching pragmatics with movies and TV series

As previously stated, movies and TV series are considered an important part of authentic materials. According to the teaching experience of the researchers, a significant number of students have acquired English through watching movies and TV to the point where it is difficult to conceive how effectively and appropriately they utilized the language. Therefore, the role of movies and TV shows cannot be overlooked in the process

of language learning. Teachers should encourage their learners to watch movies and TV shows to enhance their pragmatic competence since these media include authentic language. Heidari et al. (2020) argue that movies and TV series may substitute onerous textbooks in fostering learners' pragmatic skills and teaching speech acts. Movies and TV shows have lately emerged as one of the richest resources accessible to EFL teachers, attracting the interest of a number of researchers in the field of second language acquisition. Various empirical research on the effectiveness of using authentic videos to teach speech acts in the classroom has been undertaken. In their study, Alerwi and Alzahrani (2020) suggest that the use of sitcoms may facilitate the learning of the speech acts of request, refusal, apologies, and compliment response by learners.

A study done by Alsmari (2020) assessed the effects of metapragmatic instruction on Saudi female EFL Students' pragmalinguistic and sociopragmatic aspects while generating a speech act of complaint. Her experiment included a sample of 62 students who were majoring in English as a second language., the experimental group was presented with video-driven extracts, while the control group was exclusively taught via the usual manner. The results of the study showed that the experimental group that got a video-driven technique outperformed the control group in terms of performance and generated the speech act of complaint that were more suitable than those produced by the control group. After receiving the intervention, the students became also more expressive and provided longer replies as opposed to the linguistically constrained responses they provided in the pre-test. The results of her study also revealed that The participants themselves improved their ability to identify linguistic forms of politeness in real-world contexts. Similar findings were revealed in research done by Iranmanesh and Darani (2018). The findings indicated that movies had a substantial impact on the acquisition of idiomatic and daily English expressions among Iranian EFL students, hence enhancing their English proficiency.

Moreover, research has shown that movies and television programs may improve Students' speech comprehension. Rodgers and Webb (2017) investigated Japanese university Students' comprehension by exposing them to ten 42-min episodes of an American TV show with and without subtitles. The findings indicated that episodes help learners improve their comprehension.

In a study conducted by Hashemian et al. (2016), 37 upper-intermediate learners, aged between 21 and 25, from an English institute in Isfahan, Iran, were divided into two groups, experimental and control, based on their Quick Oxford Placement Test (QOPT) scores. A variant of the discourse completion test (DCT) was utilized as a pre-and post-test to evaluate the request and apology strategies employed by the respondents before and after the instruction. Participants devoted 30–40 min every Saturday and Wednesday for 7 weeks to viewing and analyzing clips from the movie *Before Sunset*.

The results of the study indicated that the students were able to apply various request and apology strategies after watching the movie.

From an empirical standpoint, the utilization of movies is also beneficial for enhancing EFL learners' pragmatic awareness. For instance, Rylander et al. (2013) study found that the application of video snippets from TV shows and movies improved learners' speech act recognition, realization, notice, and production. In a study, Damaiyanti (2016) explored the influence of movies on the conversational implicature of language learners and discovered that movies may contribute to the development of learners' understanding of speech acts.

Eryilmaz and Darn (2005) argue that EFL teachers must raise their Students' consciousness of non-verbal communication to be able to communicate naturally, confidently, and effectively in the target language. They also underlined the need for teachers to assist students in eliminating intercultural misunderstandings since non-verbal communication is a system comprised of a variety of elements that are often utilized in conjunction to facilitate expression. It is believed that body language, such as facial expressions, gestures, eye contact, proximity, and posture (Eryilmaz and Darn, 2005) as well as intonation and taking turns (Coulthard, 1985; Kato, 2000), is essential to the language-learning process because they help learners be conscious of communicating messages, attempting to avoid misunderstandings, and adapting to the target culture (Kalra, 2017).

The situational context of a conversation refers to the environment, time, and place, among other things, in which it takes place, as well as the interaction between the participants. According to Yule (2000), context is the physical setting in which a word is used. Several studies have shown that context may play a significant influence in deciding the verbal and non-verbal choices of interlocutors and aiding them in achieving their communication goals (de Kok, 2008; Nobrega, 2009; Song, 2010; Abrams, 2014; Garten et al., 2019). A study conducted by Ismaili (2013) found that clips extracted from movies and TV series had a greater bearing on providing an authentic real-life environment for the production of speech acts.

Methodology

Participants

The sample of the present study comprised 42 Kurdish EFL junior university students studying the English language at Cihan University in Duhok, Iraq. They were randomly divided into two groups: the experimental group ($n = 21$) and the control group ($n = 21$). The participants were aged 21–25 years. To ensure the homogeneity of the participants, an IELTS test sample consisting of four sections (Listening, Speaking, Reading, and Writing) was used before the treatment. Only

those students who achieved an intermediate level on the IELTS test were selected for the study since this level is optimal for developing pragmatic competence (Kasper, 2001). It is worth mentioning that the sample did not have any prior experience studying abroad and they had not also been exposed to any kind of pragmatics course before taking part in this experiment; hence, the treatment was their first introduction to pragmatics.

Instruments of the study

Several instruments were utilized to collect data for the study. First, an IELTS test sample was used before data collection to verify the homogeneity of the chosen samples and to determine their level of language proficiency. Second, a Written Discourse Completion Test (WDCT) developed by the researchers was administered as the pre-and post-test. The WDCT test consisted of a total number of 10 scenarios concentrating on two kinds of speech acts; request and suggestion, which are most frequently utilized in every language and culture of the world. Each scenario was based on a situation in which the participants made a request and suggestion to someone in their family, social, or academic life. Such scenarios were also used to ensure that the data was as much authentic as possible. To validate the test, the test was sent via e-mail to five university professors whose specialization was pragmatics and second language acquisition from Iraq, Turkey, Cyprus, and India. They examined the clarity, precision, and appropriateness of the items of the instrument. The test was then piloted with a sample of 30 students from Knowledge University in Erbil to determine its reliability, which was discovered to be 0.821 utilizing Cronbach's alpha. This score indicates that the items of the instrument have high internal consistency. The third and final instrument used in this study was Taguchi (2011) rating scale of appropriateness which included a comprehensive depiction of pragmatic and grammatical elements as a scoring system for evaluating the students' responses to producing the targeted speech acts. Moreover, Taguchi (2011) appropriateness rating scale system consists of five points ranging from "Very poor" (1) to "Excellent" (5), as shown in Table 1.

Procedures

To gather the necessary data for examining the hypotheses under scrutiny, several procedures were followed. At first, an IELTS test sample comprising all four sections (Listening, Speaking, Reading, and Writing) was utilized to establish the homogeneity of the students. Following that, 42 students who attained intermediate level were chosen and then randomly assigned into two identical groups, one of which served as the experimental and the other as the control group. Each group consisted of 21 students.

TABLE 1 Taguchi's (2011) rating scale. Reproduced from Taguchi (2011), with permission from John Benjamins Publishing Company.

5	Excellent Almost perfectly appropriate and effective in the level of directness, politeness, and formality.
4	Good Not perfect but adequately appropriate in the level of directness, politeness, and formality. Expressions are a little off from target-like, but pretty good.
3	Fair Somewhat appropriate in the level of directness, politeness, and formality. Expressions are more direct or indirect than the situation requires.
2	Poor Clearly inappropriate. Expressions sound almost rude or too demanding.
1	Very poor Not sure if the target speech act is performed.

The researchers devised the Written Discourse Completion Test (WDCT), which served as the pre-and post-test, and then sent it to five university professors with expertise in the field of pragmatics to check the validity of its items. After that, the WDCT test was piloted on a group of 23 students, from a different university, who had the same qualities as those participating in the main study for measuring the reliability of the WDCT test. Three qualified and experienced raters assessed and rated the data obtained through the pilot study.

Cronbach's alpha was used to measure the reliability of the instrument. The value of reliability was acceptable which was 0.821. After the validity and reliability of the instrument were established, a pre-test was administered to both the experimental and control groups prior to the treatment. They had to answer the test within 30 min. It should be noted that the same techniques were used to assess and rate the responses of the participants on both the pre-test and the post-test. After that, the treatment process launched and lasted one academic semester of 12 weeks. There were two 60-min sessions every week, on Sundays and Thursdays.

The experimental group was presented with carefully chosen movie and TV series clips comprising varied instances of the targeted speech acts and were linguistically rich enough. The participants were exposed to four clips each session. These video excerpts were culled from various movies and TV series; specifically, "Office Space," "Friends," "Fast and Furious 7," "Frozen," "Aladdin," "Madagascar 3: Europe's Most Wanted," "The Blind Side," "Sleeping Beauty," and "Let's Be Cops." The Participants engaged in pre-viewing, while-viewing, and post-viewing activities for each clip throughout the session.

The control group was only exposed to the conventional approach of pragmatics. They were only required to study pragmatics at the level specified in their textbook authored by Yule (2017), which was the bare minimum (i.e., defining and explaining speech acts requests, apologies, suggestions, refusal, and advice, and completing activities concerning these speech acts).

The post-test was administered to both groups after the treatment and the results of the pre-and post-test were compared. Once all of the data had been collected, it was thoroughly evaluated and analyzed using applicable statistical procedures from SPSS, such as the Independent samples *t*-test.

Data analysis

The primary goal of this study was to investigate the influence of movie and TV series clips on Kurdish EFL learners' pragmatic competence, especially on their ability to produce speech acts of requests and suggestions. Based on Taguchi (2011) rating scale, the Students' responses to the pre-test and post-test were rated by three experienced researchers. Then the data obtained from the pre-and post-tests were statistically analyzed using SPSS version 24 statistical software. More precisely, paired-samples *t*-tests and independent-samples *t*-tests were employed to determine any significant differences in the pre-and post-test scores between the experimental and control groups.

Results

Effect of movie and TV series clips on Kurdish EFL learners' production of requests

Concerning the first research question of whether clips from different movies and TV series have an impact on the participants' performance in producing the speech act of

request, the researchers used an independent sample *t*-test, which compares the mean between two variables (Blbas et al., 2022), to compare the mean scores of both pre-test and post-tests between the experimental and control groups, as shown in Table 2.

Table 2 demonstrates that there is no statistically significant difference between the means of the experimental ($M = 3.701$; $SD = 1.375$) and control ($M = 3.714$; $SD = 1.384$) groups in the pre-test as their respective *P*-values ($t = 0.11$; $P = 0.911$) are greater than the significance threshold ($P > 0.05$). According to the findings, the level of performance shown by the participants was equivalent in some manner before the use of the instructional approaches as shown in Figure 1.

The post-test was administered to the two groups after the treatment had been administered for a full academic semester. An independent samples *t*-test was carried out to make a comparison between the post-tests concerning the production of the speech act of request, as shown in Table 3.

Table 3 demonstrates that there is a statistically significant difference between the means of the experimental ($M = 6.524$; $SD = 1.401$) and control ($M = 4.429$; $SD = 1.777$) groups in the post-test, as its *P*-value ($t = 4.244$; $P = 0.001$) is less than the significance level ($P < 0.05$). The dramatic rise in the average score of the experimental group ($M = 6.524$) compared to the control group ($M = 4.429$), as depicted in Figure 2, suggests that the pragmatic instruction in the Language classrooms had a favorable influence on the pragmatic improvement of requests made by EFL students who participated in the pedagogical intervention.

To investigate differences among groups, a paired-samples *t*-test was used to compare the pre-test and post-test scores

TABLE 2 Independent sample *t*-test between the experimental and control groups for pre-test (Request).

Pre-test	Speech act	Group	N	Mean	Std. deviation	<i>t</i>	<i>P</i> -value
	Request	Experimental	21	3.701	1.375	0.11	0.911
		Control	21	3.762	1.384		

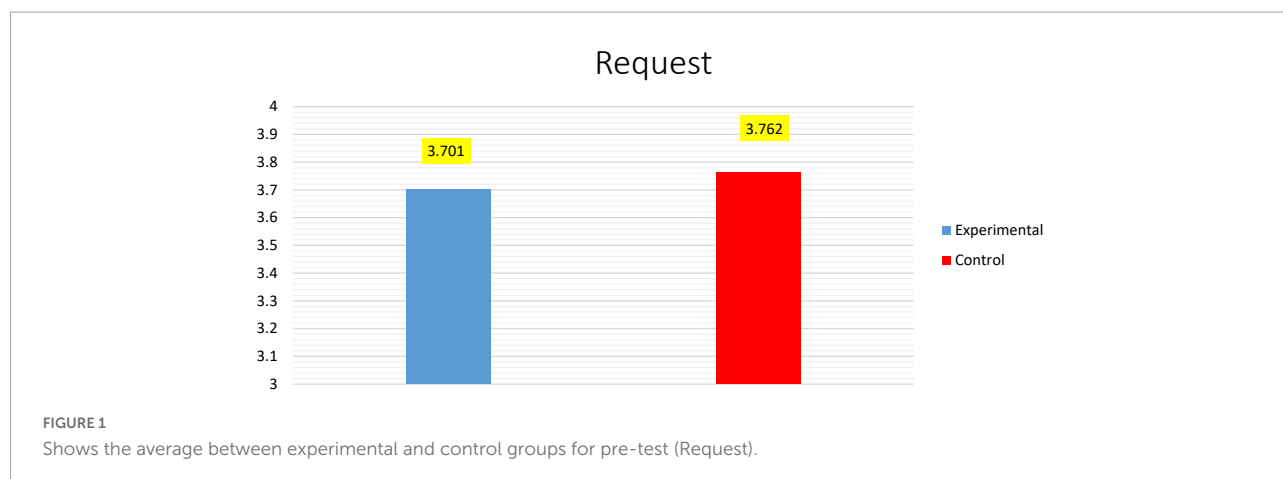
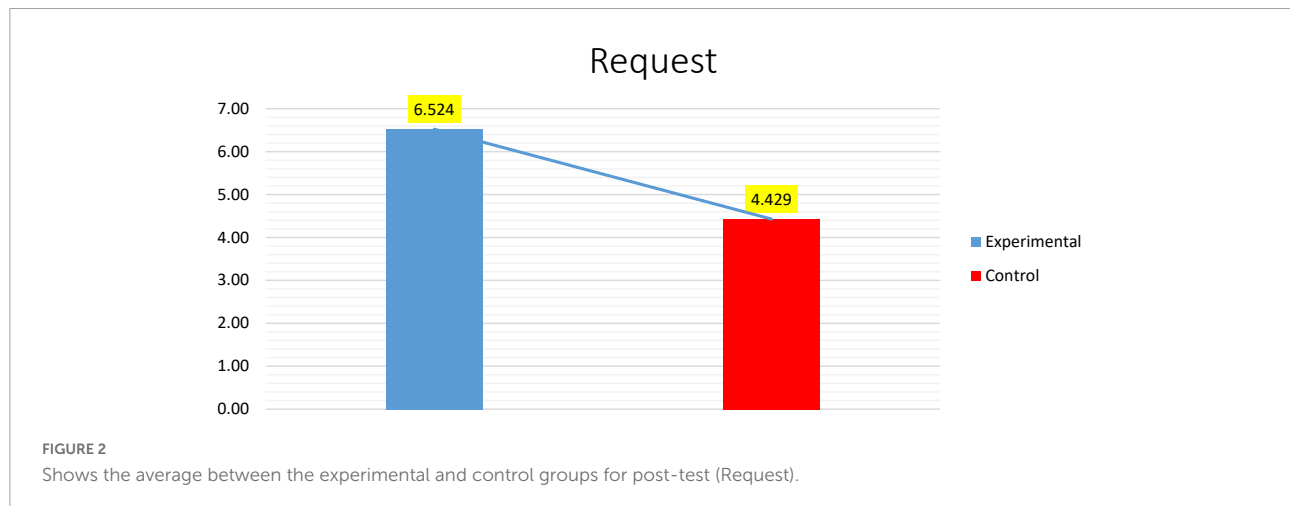


TABLE 3 Independent sample *t*-test between the experimental and control group for post-test (Request).

Post-test	Speech act	Group	N	Mean	Std. deviation	<i>t</i>	<i>P</i> -value
	Request	Experimental	21	6.524	1.401	4.244	0.001
		Control	21	4.429	1.777		



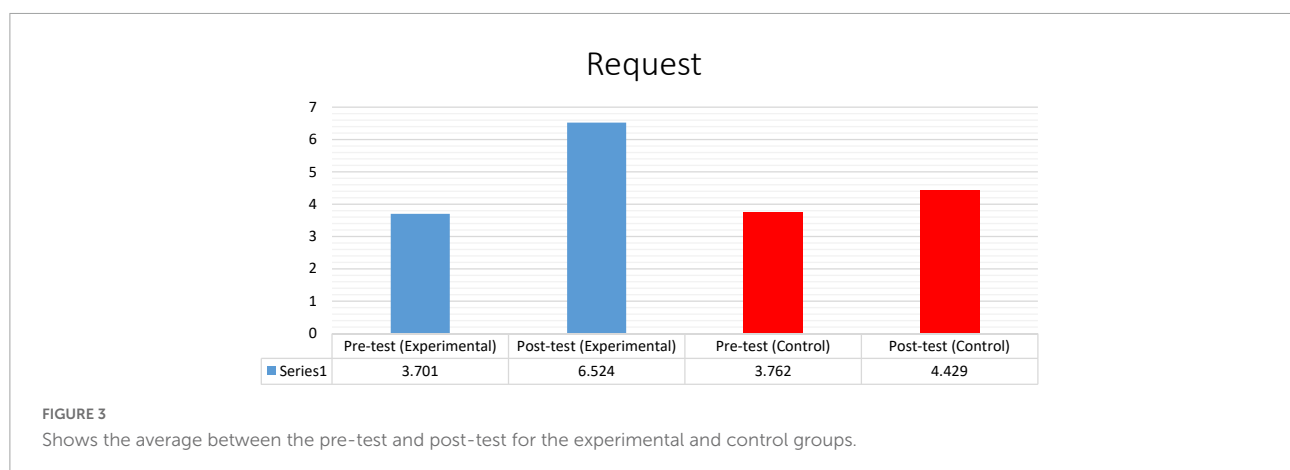
of the experimental and control groups before and after the treatment. According to the findings presented in Table 4, the performance of the participants in the experimental group substantially improved on the post-test, as indicated by a mean score of ($M = 6.524$, which represents a statistically significant

improvement ($p < 0.05$) in comparison to their performance on the pre-test.

Whereas, as shown in Figure 3, the mean score of the control group on the post-test was marginally higher ($M = 4.429$) than on the pre-test ($M = 3.762$). This was due

TABLE 4 Paired-samples *t*-test for experimental and control groups (Request).

Speech act	Group	Test	Mean	Std. deviation	<i>t</i>	<i>P</i> -value
Request	Experimental	Pre-test	3.701	1.375	11.60	0.000
		Post-test	6.524	1.401		
	Control	Pre-test	3.762	1.384	1.40	0.176
		Post-test	4.429	1.777		



to the Students' continued development as a consequence of traditional instruction.

Effect of movie and TV series clips on Kurdish EFL learners' production of suggests

To determine whether using snippets from movies and TV series has an effect on their aptitude for the production of suggestions in English, the mean scores of the pre-test were compared between the experimental and the control groups through an independent sample *t*-test, as shown in **Table 5** and **Figure 4**.

Table 5 shows that there is no statistically significant difference between the mean scores of the experimental group ($M = 4.714$; $SD = 1.232$) and the control group ($M = 4.333$; $SD = 1.390$) prior to the intervention because the experimental group's *P*-value [$t = 0.94$; $P = 0.535$ (>0.05)] is greater than the significant level of $\alpha = 0.05$, respectively, indicating that the performance of both groups on the pre-test was similar. The mean score of the control group on the post-test was marginally higher ($M = 5.048$) than on the pre-test ($M = 4.333$), as shown in **Figure 4**.

Table 6 demonstrates that the mean scores of students in the control group ($M = 5.048$; $SD = 1.23$) substantially varied from those of students who received movie and TV series clip-based pragmatic instruction ($M = 6.810$; $SD = 1,250$). Thus, there was a statistically significant difference between the mean scores of the experimental and control groups because the *P*-value [$t = 4.654$; $p = 0.001$ (<0.05)] is less than the significance level of $\alpha = 0.05$

and the average of the experimental group ($M = 6.810$) is greater than the average of the control group ($M = 5.048$), as shown in **Figure 5**.

Using a paired-samples *t*-test, the effect of the intervention on the experimental group participants was investigated by comparing the means of the pre-test and post-test scores. As indicated in **Table 7**, the participants' performance on the post-test drastically enhanced ($M = 6.810$) and was statistically significant ($p = 0.001$; $p < 0.05$) compared to their performance on the pre-test. By comparing the means of the pre-test and post-test scores, the paired-samples *t*-test was also used to analyze the effect of the traditional method of teaching suggestions on the participants in the control group. The findings indicated in **Table 7** that the mean score on the post-test ($M = 5.048$) was noticeably higher than on the pre-test ($M = 4.333$), as shown in **Figure 6**.

To examine differences within groups, we used a paired-sample *t*-test to compare the pre- and post-tests in the experimental and control groups before and after the treatment. The findings in **Table 8** demonstrate that the participants in the experimental group performed much better in the production of requests and suggestions on the post-test ($M = 6.524$; $M = 6.810$, respectively), a difference that was statistically significant *p*-value ($P < 0.051$) compared to the pre-test. The mean scores of the control group ($M = 4.429$; $M = 5.048$), on the other hand, marginally rose in the post-test, which may be ascribed to the participants' continued growth as a consequence of the traditional approach of pragmatic aspects. In conclusion, the statistical difference between the two groups indicates the positive influence of implementing clips derived from movies and TV series in EFL classrooms to develop the EFL learners' pragmatic competence and produce the speech acts of requests

TABLE 5 Independent sample *t*-test between experimental and control groups for pre-test (Suggestion).

Pre-test	Speech act	Group	N	Mean	Std. deviation	<i>t</i>	<i>P</i> -value
	Suggestion	Experimental	21	4.714	1.231	0.94	0.535
		Control	21	4.333	1.390		

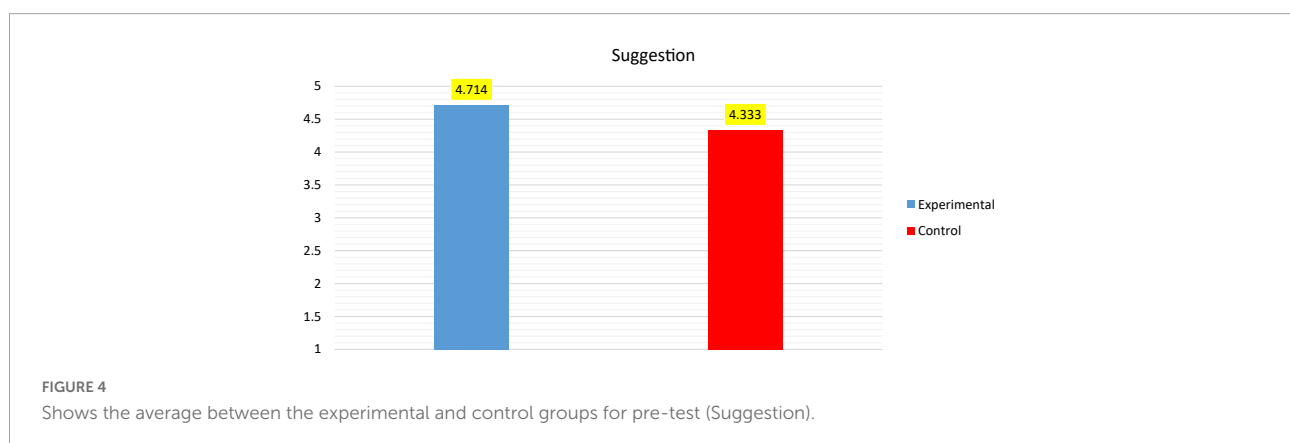


TABLE 6 Independent sample *t*-test between the experimental and control groups for post-test (Suggestion).

Post-test	Speech act	Group	N	Mean	Std. deviation	<i>t</i>	<i>P</i> -value
	Suggestion	Experimental	21	6.810	1.250	4.654	0.001
		Control	21	5.048	1.203		

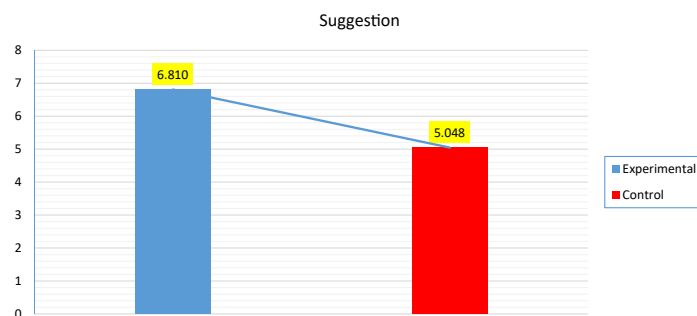


FIGURE 5

Shows the average between the experimental and control groups for post-test (Suggestion).

TABLE 7 Paired-samples *t*-test for experimental and control groups (Suggestion).

Speech act	Group	Test	Mean	Std. deviation	<i>t</i>	<i>P</i> -value
Suggestion	Experimental	Pre-test	4.714	1.231	7.15	0.000
		Post-test	6.810	1.250		
	Control	Pre-test	4.333	1.390	2.85	0.010
		Post-test	5.048	1.23		

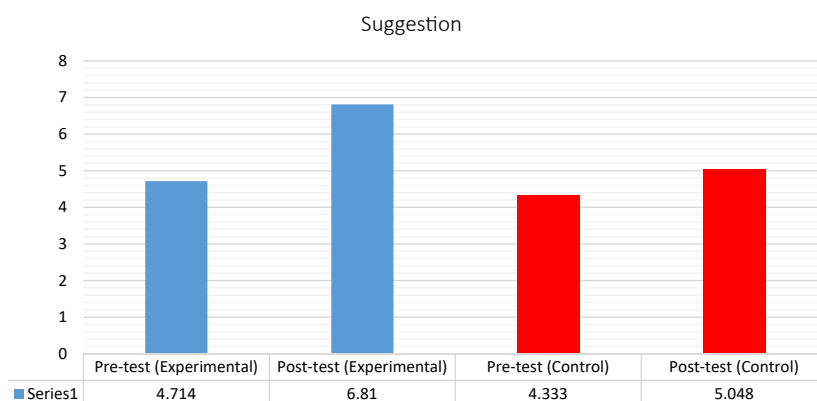


FIGURE 6

Shows the average between the pre-test and post-test for the experimental and control groups.

and suggestions. The mean scores of both pre-test and post-tests for the speech acts of request and suggestion are shown in Figure 7.

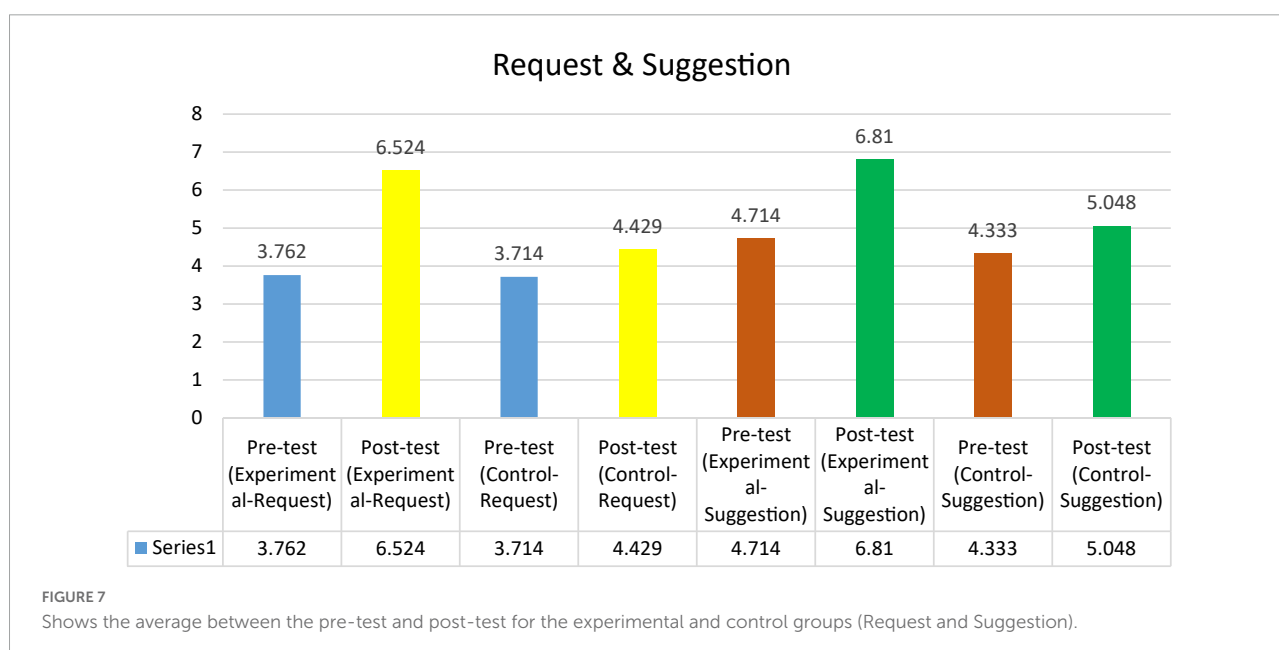
Discussion

The objective of this study was to examine the influence of movie and TV series extracts on Kurdish EFL learners'

pragmatic competence, and specifically on their production of pragmatically acceptable and grammatically precise target-like requests and suggestions. Generally speaking, the findings of this study were promising as they revealed that the participants in the experimental group outperformed those in the control group. This study indicates that, when compared to traditional written texts, movie and television series clips may be considered preferable possibilities for teaching speech acts since they represent

TABLE 8 Paired-samples *t*-test for the experimental and control groups.

Speech act	Group	Test	Mean	Std. deviation	<i>t</i>	<i>P</i> -value
Request	Experimental	Pre-test	3.762	1.375	11.60	0.000
		Post-test	6.524	1.401		
	Control	Pre-test	3.714	1.384	1.40	0.176
		Post-test	4.429	1.777		
Suggestion	Experimental	Pre-test	4.714	1.231	7.15	0.000
		Post-test	6.810	1.250		
	Control	Pre-test	4.333	1.390	2.85	0.010
		Post-test	5.048	1.203		



more realistic and communicative situations that occur in the actual world.

Considering the first and second research questions, the findings of the study found that there were significant differences between the experimental and control groups in the post-test. More specifically, the results revealed that the experimental group significantly improved their production of the speech act requests and suggestions after the intervention period. Consequently, it was found that the experimental group outperformed the control group. The findings of this study confirm previous research on the positive effect of instruction on learners' development of pragmatics (Bardovi-Harlig, 2001; Alcón-Soler, 2005; Birjandi and Derakhshan, 2014; Rajabi and Farahian, 2013; Taguchi, 2015). Therefore, many believe that pragmatic instruction should be part of English classrooms just like grammar and vocabulary (Taguchi, 2015). In other words, the medium of instruction seems to play an integral role in learners' acquisition of speech acts. Moreover, the findings of the study demonstrated that pragmatic aspects are teachable (Ishihara and Cohen, 2014).

The results of this study revealed that explicit instruction plays a great role in enhancing learners' pragmatic competence and comprehending conversational implicatures correctly. Such a result is compatible with House (1996), Fazilatfar and Cheraghi (2013), and Ziashahabi et al. (2020). In their experimental study, it was even found that the participants who were exposed to the explicit instruction had not forgotten the materials they studied during the lessons.

The results of the study revealed that by teaching pragmatic elements through the use of consciousness-raising instruction, language learners produce and understand speech acts better than in the traditional method in which the learners only get some theoretical knowledge about the second language pragmatics. Such a result is in line with previous studies that involve teaching pragmatics through consciousness-raising instruction (Halenko and Jones, 2011; Abolfathiasl and Abdullah, 2015). Such a result support Schmidt (1990) Noticing Hypothesis, which argues that second language features cannot be acquired by learners without noticing, asserting that "while there is subliminal perception, there is no subliminal learning"

(p. 26). Consciousness-raising tasks help learners to notice the norms, recognize, and process the differences in the production of requests and suggestions between English and Kurdish. In the process of noticing and comparing, learners eventually internalize L2 norms to become intake (Schmidt, 1993).

The results of the study are consistent with the findings of Abbasian et al. (2016), who investigated the influence of authentic materials on the pragmatic competence of EFL learners. The researchers found that providing authentic materials significantly improved the pragmatic skills of language learners.

The results of this study further proved that teaching pragmatics through movies and TV series clips is better than printed texts only. These results are in line with the findings of Heidari et al. (2020), who suggest that video clips derived from movies can be considered better alternatives for teaching speech acts compared to the traditional printed texts because these clips are authentic and reflect life-like, communicative events happening in the world.

Conclusion

This study explored the impact of instruction by using movie and TV series snippets on EFL learners' pragmatic competence. The results of the study indicate that teaching pragmatics using movie and TV series clips is effective and beneficial. The study shows that the production of speech acts such as requests and suggestions improved significantly with the use of explicit teaching incorporating movie and TV series clips. The results of the study show that when EFL learners are exposed to contextualized learning situations, their linguistic performance and pragmatic competence would improve drastically as a result of the rich input offered by real audio-visual resources. This is a strong invitation for teachers to reference movies and TV series when teaching pragmatics from a dull textbook to create an engaging classroom atmosphere. This study proposes a pragmatic intervention on English speech acts by using movie and TV series clips to increase Kurdish EFL Students' knowledge of the pragmalinguistic and sociopragmatic variables related to the formulation of precise and appropriate requests and suggestions. Teachers and researchers should undertake more studies to explore the effect of movie and TV series clips on learners' production of other speech acts as well as their comprehension, and investigate the Kurdish EFL learners' views on this issue. Although the present study attempted to fill a vacuum in the area of pragmatics, the researchers must acknowledge some limitations. First, there were limitations regarding the sample. The small sample size makes it impossible to establish reliable generalizations. More research is needed to examine the

results with greater sample size. Furthermore, all participants were intermediate-level university students. More research is needed to determine whether the same results would apply to students with varying levels of English proficiency. Second, because this was an experimental study, no qualitative data collection methods were used. Several qualitative and quantitative measures should be used to improve the validity of future studies. Finally, a written DCT was used as a pre-test and post-test to collect the data. Future research is required to use an oral DCT as a pre-test and post-test.

Data availability statement

The datasets presented in this study can be found in online repositories. The names of the repository/repositories and accession number(s) can be found in the article/supplementary material.

Ethics statement

The studies involving human participants were reviewed and approved by the Ethical Committee Board of Cyprus International University. The patients/participants provided their written informed consent to participate in this study.

Author contributions

All authors listed have made a substantial, direct, and intellectual contribution to the work, and approved it for publication.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Examining the effects of stroke on students' L2-grit levels in an EFL context: A case of Northern Iraq

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This article investigates the effects of stroke on students' L2-grit levels in an EFL context in Northern Iraq. A model was created to find how various components such as verbal, non-verbal, valuing, and activities that determine stroke levels affect students' grit. This study adopted the L2- Grit scale and a language domain-specific grit scale to measure the learners' L2-grit levels. Also, the Students' Stroke Scale (SSS) was used to measure the participants' stroke levels. The study's sample consisted of 199 participants from various academic levels, undergraduate, graduate, and postgraduate at several Northern Iraq universities. The results reveal a positive and statistically significant association between the score on the L2-Grit scale and the score on the Stroke scale; more specifically, as the scores on the L2-grit scale rise, so do the scores on the Stroke scale. The mean of low stroke is lower than the means of medium stroke and high stroke indicating that as people's stroke levels grow, so does their L2-grit status. The regression coefficients estimated within the framework of the regression model structured with the logit, the link function, are the same in each category of the dependent variable, satisfying the parallel curves assumption. The overall results show that positive stroke helps learners' L2-grit levels to arise and lead to a better learning process.

KEYWORDS

L2-grit level, stroke level, EFL context, university students, Northern Iraq

Introduction

EFL and second language acquisition (SLA) receive a great deal of attention from language, and education, because of their crucial roles in furthering the learning and teaching agendas of many countries and institutions and psychology academics. In the north of Iraq, which has its own Kurdish Regional Government (KRG), students must take EFL courses from elementary school through university (Ismael and Mohammadzadeh, 2022). Consequently, it is essential to investigate the various factors contributing to improving English language learning and teaching.

Willingness to communicate (WTC) is the goal students of English as a foreign language work toward achieving. WTC in a second language has been the subject of extensive research, and the term “readiness to enter into discourse at a particular time with a specific person or persons, using a L2” has been developed to describe this ability (as cited in [Lee, 2020](#), p. 1). On the other hand, one must not limit the concept of communication to merely verbal exchanges. Another vital talent that has garnered emphasis in recent years is the ability to communicate in writing. This is because written communication is used extensively in print and online and because teachers use it to evaluate their students’ progress ([Yancey, 2009](#); [Sedita, 2013](#)).

Most of the time, a person’s talent and grades are the only elements considered when predicting that person’s future success, and many or all other individual factors are neglected. One cannot argue that skill is not vital in forecasting one’s success; yet, it should not be considered the only determinant of success, as many people with great talent fail to accomplish anything of worth in their lives. Their cognitive and non-cognitive skills substantially influence an individual’s degree of success or failure. Cognitive skills are referred to as the capacity for thinking, remembering, and concentrating. On the other hand, non-cognitive talents include motivation, the ability to self-regulate and believe in one’s capabilities, coping mechanisms, the ability to bounce back from setbacks, and personality.

Positive Psychology (PP) has become an essential subject in EFL and SLA due to its dedication and concern for the comfort and pleasure of the learners during the learning process ([Gabrys-Barker et al., 2016](#); [Oxford, 2016](#); [Strzałka, 2016](#); [Li, 2020](#)). Positive psychology is categorised by [Seligman and Csikszentmihalyi \(2014\)](#) according to subjective, individual, and group levels. For the subjective level, Seligman and Csikszentmihalyi assert that it is about “valued subjective experiences: wellbeing, contentment, and satisfaction (in the past); hope and optimism (for the future); and flow and happiness (in the present)”; the individual level is about traits such as “the capacity for love and vocation, courage, interpersonal skill, aesthetic sensibility, perseverance, forgiveness, originality, future mindedness, spirituality, high talent, and wisdom”; the group level, “is about the civic virtues and the institutions that move individuals toward better citizenship: responsibility, nurturance, altruism, civility, moderation, tolerance, and work ethic” (p. 5). On the basis of the aforementioned levels, [Gabrys-Barker et al. \(2016\)](#) assert that subjective experiences, individual traits, and the learning environment are crucial factors in influencing the performance of EFL learners.

Grit is one of the positive non-cognitive attributes. The concept of “grit” as a distinguishing characteristic of one’s personality gained attraction in the field of psychology in 2007, when it was first presented by [Duckworth et al. \(2007\)](#). It is thought to be the only non-cognitive characteristic that all successful people have in common with one another. [Duckworth et al. \(2007\)](#) say that grit is perseverance and passion for long-term goals and that grit “entails working strenuously toward challenges,

maintaining effort and interest over the years despite failure, adversity, and plateaus in progress” (p. 1087). The Department of Education of the United States of America has designated grit, along with tenacity and perseverance, to be one of the most critical predictors of success. This declaration is an essential acknowledgement of grit’s essential role ([Shechtman et al., 2013](#)). In spite of all the attention that grit has garnered over the course of the last decade, the EFL has yet to fully investigate it. According to [MacIntyre et al.’s \(2019\)](#) research, grit plays an important part in the process of language acquisition, and this aspect of the phenomenon needs to be investigated.

Researchers have only just begun to acknowledge the significance that grit and positive psychology have in enhancing a learner’s ability to pick up a new language. Consideration of these factors is a recent development. However, there are still some gaps in the existing research examining how the interaction between students and their professors is related to the students’ grit levels in an English as a Foreign Language setting. The current study investigates whether or not there is a significantly distinct relationship between the recognition that students in Northern Iraq receive inside and outside of the classroom and their levels of grit. Specifically, this paper is an attempt to answer the following research questions (RQ):

- RQ1: Is there a significant relationship between the Grit scale score and the Stroke scale score?
- RQ2: Do the Stroke scale scores of the individuals show a significant difference according to the Grouped Grit Status (Low, Medium, and High)?
- RQ3: Are there any effects of stroke components (verbal, non-verbal, valuing, and activities) on grit conditions?

Literature review

Grit

Research on grit, which is still in its infancy, has attracted a significant amount of focus in recent years. [Duckworth et al. \(2007\)](#), who defined grit as “passion and perseverance for especially long-term goals,” is one of the most prominent and well-known researchers on grit (p. 1087). According to Duckworth, the initial spark that got her interested in studying grit was when she questioned what elements, other than opportunity and talent, determine one person to be more successful than another person. “Grit does not just have resilience in the face of failure,” says Perkins-Gough, “but also having deep commitments that you remain loyal to over many years” (2013, p. 16).

Grit is an abbreviation that stands for the following four words: guts, resilience, initiative, and tenacity ([Thaler and Koval, 2015](#)). In order to be considered a person with grit, one must exhibit all four of these attributes. It was discovered in a study conducted by the United States Department of Education in 2013 that grit is equally as significant as intelligence in determining

one's level of achievement. Duckworth has developed a self-report grit scale that may be used to assess the grit levels of an individual. This will allow grit to be measured. In the Western context, it was discovered that grit had a positive correlation with learners' achievement and retainment (Schmidt et al., 2017; Park et al., 2018; Clark and Malecki, 2019).

Later, Teimouri et al. (2020) developed a new grit scale based on Duckworth's, which is utilised in this article. The grit scale proposed by Teimouri et al. (2020) is a domain-specific grit scale that measures the grit levels of SFL and EFL learners. According to Sudina and Plonsky (2021) perseverance of effort which is a "subscale of grit was a stronger predictor of students' grades and self-reported proficiency" (p. 831). This demonstrates the significance of studies on grit and the development of its application in language acquisition, as students frequently quit when confronted with challenges.

Stroke

The dynamic relationship that develops between a teacher and the students under their tutelage is of critical significance in teaching and learning environments. Students benefit from having positive relationships with their professors because it helps them learn, gives them opportunities to develop the required interpersonal skills, lowers their anxiety, and boosts their drive. Eric Berne developed a method called transactional analysis (TA) that is now considered to be one of the primary methods for analysing interpersonal relationships, "TA is a theory of personality and systematic psychotherapy for personal growth and personal change" (Stewart and Joines, 1987, p. 3). This approach has seen a great deal of application in the fields of counselling, education, communication, and psychology (Solomon, 2003; Barrow, 2007). In educational contexts, TA is utilised to aid in the establishment of clear communication between instructors and students and to prevent the initiation of confrontations that are counterproductive (Stewart and Joines, 1987). Ego states, transactions, life scenarios, life positions, temporal structures, and strokes are the six components that make up the TA method (Shirai, 2006).

The term stroke refers to any action taken to recognise the presence of another person or their ideals (Shirai, 2006). It is a measure of the human capacity for recognition. Interpersonal connections that can be seen as satisfying an emotional need are called strokes. There are many distinct varieties of strokes, including those that are verbal or non-verbal, positive or negative, conditional or unconditional. A simple greeting all the way up to an in-depth discussion might be considered verbal strokes. Non-verbal strokes include things like smiling, nodding your head, shaking hands, and other such actions. Positive strokes are experiences that the recipient views as being pleasant and satisfying, whereas negative strokes are experiences that the receiver views as being unpleasant and unsatisfactory. The actions that people engage in are referred to as conditional strokes,

whereas the qualities that people possess are referred to as unconditional strokes (Stewart and Joines, 1987).

Research on grit

The Department of Education of the United States of America stated in 2013 that grit is among the most crucial qualities in deciding one's success in this 21st century. As a result, ever since the concept of grit was first brought up in the academic world, a wide variety of studies on the topic have been carried out. Chang (2014) conducted research at a private college in the Southern United States to investigate whether or not differences in grit levels are associated with differences in academic performance based on race and gender. The research was carried out on first-year students, 51% of whom were female and 49% were male, 55% of the students were white, 18% were Hispanic, 14% were Asian or Pacific Islander, and 9% were black. According to the findings of the study, grit does not have any bearing on the grades received by first-year students. It also demonstrated that differences in race or gender do not have an effect on one's level of grit. Credé et al. (2017) concur with Chang's findings that gender and race are non-factors in determining whether an individual is gritty.

In more recent studies (Ma et al., 2020; Whipple and Dimitrova-Grajzl, 2021) researchers looked at the effects of grit on male and female students and found that there were significant gender differences in the effects of grit. According to the findings of Ma, Ma, and Lan, higher levels of grit have a beneficial effect on both males and females with regard to the association between teacher autonomy support and social competence. On the other hand, a lower level of grit was found to be significantly associated with the male participants' association but not with the females. The participants in this study consisted of 1,009 undergraduates from China. On the other hand, Whipple and Dimitrova-Grajzl found that grit has a positive effect on the college point averages of the male participants, but that it has no significant effect on the college point averages of the female participants.

According to the findings of some studies, the correlation between age and grit varies depending on the setting. A number of studies (Duckworth et al., 2007; Peña and Duckworth, 2018; Bliss and Jacobson, 2020) demonstrate that there is a significant relationship between age and grit. Other studies do not find a correlation between the two (Rhodes and Giovannetti, 2021). According to Duckworth and her colleagues, grit is not a fixed trait; rather, it shifts and develops over the course of one's life, and it may become more robust as a person ages due to the fact that, in general, older people value their goals and the world around them more than younger people do. Peña and Duckworth demonstrated that there is a significant correlation between age and grit. Additionally, Bliss and Jacobson found that age and grit have a strong correlation with one another, and that the two of them can successfully predict one's academic success. In spite of

this, Rhodes and Giovannetti (2021) conducted a study on getting older and discovered that there is no significant correlation between grit and age. They claim that one's level of grit is unaffected by the passage of time, from young adulthood to old age.

Credé et al. (2017) carried out a study on the previously published research on grit, and as part of that process, they examined 88 samples. They came to the conclusion that grit has a moderate relationship with performance and retention across a variety of academic disciplines. In addition to this, they discovered that grit could predict performance, albeit to a limited extent. According to the findings of Credé et al. (2017) grit is a factor that predicts retention in a manner that is comparable to that of the traditional factors that have been the focus in recent years, such as high marks and cognitive abilities.

Research on stroke and grit

Academic research has not yet conducted an exhaustive investigation into how stroke affects grit levels. The current study was made possible by the publication of two significant studies in 2022. These papers prepared the ground for the current paper to be produced. To begin, Yuan (2022) investigated the ways in which increasing students' exposure to stroke in the classroom could boost their levels of grit. China served as the location for this study's setting. In order for Yuan to achieve his objective, he gathered information from a sample of 316 Chinese university students who were studying English as a foreign language. These students came from more than 30 cities across China. The students were given three different questionnaires to fill out: one about the teacher's stroke, one about student rapport, and one about the students' grit. The most important takeaways from the study, which were obtained through running regression, are that there are positive associations between stroke and its effects on learners' grit, and that these associations are correlated positively with one another.

Second, Shen and Guo (2022) carried out a study in which they investigated the connection between the amount of respect and support that students receive from their teachers and the amount of grit that the students exhibit in their academic pursuits. Respect and support are two essential aspects of stroke, despite the fact that the topic of stroke was not directly addressed in this passage. This research was carried out in China, and the sample size consisted of 613 individuals who were studying English as a second language. Initially, the Spearman correlation was utilised, and it was found that teacher respect, teacher support, and grit were strongly correlated with one another. Grit was also found to be strongly correlated with respect for teachers. After that, multiple regression analysis was performed, and the results showed that the respect and support of teachers had a significant impact on the higher levels of grit displayed by the learners. This was determined based on the findings of the study.

Model of the research

Various studies show that stroke and grit levels are important in learning English. Examining the effect of stroke level on L2-grit status in the research model is the centre of the research. In this context, our study was designed within the scope of the research model in Figure 1. We conducted the study based on the components such as verbal, non-verbal, valuing, and activities that determine stroke levels included in the model.

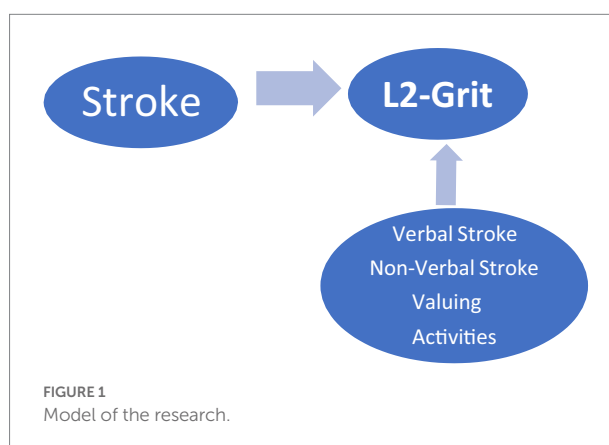
Theoretical framework

Design

In this particular study, we carried out research in the form of a survey. We began by asking the participants some personal questions about their age, gender, city, university, and topic of study. These questions were presented in the form of a survey. Then, we utilised two scales to measure the L2-grit levels of the participants, derived from Teimouri et al. (2020), and the stroke status of the students using the SSS created by Pishghadam and Khajavy (2014). Survey research was used to "provide evidence on practise, attitudes, and knowledge" (Story and Tait, 2019).

Participants and setting

Because there is a dearth of study conducted in this part of the world, we have decided to conduct our investigation in the northern region of Iraq. The concept of grit has been investigated in a variety of settings, including Iran, China, Japan, and Thailand (Yamashita, 2018; Gyamfi and Lai, 2020; Wei et al., 2020; Khajavy et al., 2021), and the purpose of our research was to make a contribution to the existing body of work on the topic. After obtaining the necessary clearance from the relevant authorities, the questionnaire was distributed to a number of educational institutions. Both instructors and students were requested to reply voluntarily to the survey. There was a total of 199 participants who



responded to the survey, 108 of them were male and 91 of whom were female. There was a total of 146 participants who fell into the age range of 16–26, and there were 53 participants who fell into the age range of 26 and above. The age ranges of the participants were divided into two categories, 16–26 years old and 26 years old and above. The number of participants from private universities came in at 113, while the number of participants from public universities came in at 86.

Instruments

The students' cumulative grade point averages in their senior year of high school are taken into consideration when admittance decisions are made at governmental colleges and institutes in the Northern region of Iraq. The students will subsequently fill out a form titled "Zankoline" to indicate their desired departments. However, students must be careful when filling out this form; if they make a mistake, they may end up in a department they never selected. Traditional measurements such as this one is utilised in various nations, and they have proven to be fairly useful in determining students' achievements (Kuncel et al., 2001). Recent research has demonstrated, however, that traditional measurements alone are insufficient; combining traditional and non-cognitive measures has proven to be far more accurate (Sternberg et al., 2012).

For students and learners of a language, frustration is a common experience. During the SLA process, one encounters a great number of challenges and roadblocks. When they cannot envision a successful future in their field, a lot of people give up, particularly students at SLA universities. Because of these challenges, the students and learners may experience feelings of depression and anxiety. Therefore, it will be necessary for them to have strong non-cognitive skills. Krashen (1992) presents the Affective Filter Hypothesis, which is a theory on non-cognitive skills (AFH). According to Krashen's theory, the process of learning a language is directly influenced by the mental states of the learners, such as their levels of anxiety, motivation, and self-confidence. He continues by explaining that students who have a low level of fear, high levels of motivation, and high levels of self-confidence will be more successful in learning a new language.

L2-grit scale

Numerous studies have been undertaken by researchers in order to identify the degree to which grit is related to other non-cognitive talents. Researchers Reraki et al. (2015) investigated the connection between motivation and grit in college students and came to the conclusion that there is a positive connection between the two concepts as well as a close connection between the two concepts. Changlek and Palanukulwong (2015) carried out an additional study on English language learners in Thailand,

and similar to the previous research, they discovered a favourable link between motivation and grit.

According to Duckworth et al. (2007), there is a correlation between grit and the Big Five personality system. Neuroticism, extraversion, openness, agreeableness, and conscientiousness are the five characteristics that make up the Big Five, which Costa and McCrae (1992) define as the most dependable framework for describing personality. Mayer and Skimmyhorn (2017) conducted a study on two military cadets in order to establish whether or not grit corresponds with the Big Five. The participants in the study were required to complete challenging academic tasks. They came to the conclusion that grit has a very strong positive correlation with conscientiousness. According to the findings of the study, grit also had a favourable correlation with the other four Big Five factors.

Based on the understanding of grit and how effective it might be, the L2-Grit scale was used to measure the participants' grit levels in this paper. In 2017, Teimouri, Plonsky, and Tabandeh worked together to develop a domain-specific grit scale for the language domain. Their work was inspired by the original grit scale developed by Duckworth et al. (2007), which was a domain-general grit scale. Teimouri et al. (2020) measured the motivational variables of intended effort, Second Language Willingness to Communicate, and attention. According to Lake (2013), concerning measuring intended effort related to real effort, the researchers have employed a six-point Likert-type scale consisting of three items. To measure the students' willingness to communicate in L2 (L2 WTC), the researchers have used a six-point Likert-type four items scale adopted by Yashima (2002). L2 WTC refers to the students' intention to use L2 when no one pushes them (Khajavy et al., 2018). Finally, to measure the students' attention levels, the researchers have employed a six-point Likert-type three items scale.

Mindsets is another aspect that Teimouri et al. (2020) have explored. According to the Mindsets theory (Dweck and Yeager, 2019), there are two groups of people; those who possess fixed mindsets believe that their cognitive abilities are unchangeable, and those who possess growth mindsets believe that their cognitive abilities are flexible. In order to measure whether the students possess fixed or growth mindsets, the researchers have used a seven-point Likert-type four items. Teimouri et al. (2020) have used L2 anxiety and L2 joy for emotional measures. To measure the sample students' L2 anxiety, they used a six-point Likert-type four items scale. Regarding measuring the L2 joy of the students, the researchers have employed a six-point Likert-type four items scale adopted from Teimouri (2017).

The final aspect of the sample students that Teimouri et al. (2020) have measured was language achievement. In order to measure the students' language achievement, the researchers analysed three things; students' grades in three English courses, their GPA (grade point average), and English language proficiency.

In the first question, Teimouri et al. (2020) wanted to learn how their newly-created L2-Grit scale is reliable and valid. The scale was valid and reliable as it was correlated to the

domain-general Grit scale. Also, to further show its validity, the students' self-report grit scale correlated with the teachers' report on the students' grit levels. Furthermore, the L2-Grit scale positively correlated to the students' language achievement measures. The second question Teimouri et al. (2020) addressed in their research was the relationship between students' motivation and emotions with their L2 grit. They have found out that motivation and emotions positively correlate to grit; gritty students were more inclined to learn, focus and engage in L2 classes. It is also shown that grit is negatively correlated to anxiety, similar results as (Changlek and Palanukulwong, 2015), but positively correlated to joy in L2 learning, a similar finding to (Credé et al., 2017). The findings also showed that the newly-created L2-Grit scale is more potent than the domain-general scale in predicting the relationship between the students' motivation and emotions to grit.

Concerning the relationship between the students' intelligence and grit, the findings of Teimouri et al. (2020) have shown that gritty students view a growth mindset to be the preferable type of intelligence. It has also shown a positive correlation between grit and a growth mindset and a negative correlation to a fixed mindset. This finding reiterates the idea put forth by Perkins-Gough (2013) that since grit contains perseverance of effort, then it is natural for gritty students to view a growth mindset of intelligence positively. Finally, regarding the third question of Teimouri et al. (2020), the research showed that grit correlates positively with language achievement. The research has also shown that the L2-Grit scale, a language domain-specific grit scale, is more accurate in measuring the relationship between grit and language achievement than the general-domain grit scale.

Students' stroke scale

Pishghadam and Khajavy (2014) created and validated a measure of student stroke in order to investigate the relationship between student stroke and motivation, which led to the discovery of a positive connection between them. Irajzad et al. (2017) were the ones in charge of another study that looked at the strokes that were derived from Iranian high school students who were enrolled in language classes. The findings revealed that teachers employ a wide variety of pedagogical approaches when working with students on the development of their language skills. They mostly attributed their success to the kinds of frameworks that they put in place during their professional lives.

Findings

Research Question 1: Is there a significant relationship between the Grit scale score and the Stroke scale score?

Table 1 shows a moderate, positive and significant relationship between the Grit scale score and the Stroke scale score ($r = 0.35$,

TABLE 1 Correlation between grit scale score and stroke scale score.

		Grit	Stroke
GRIT	Pearson correlation	1	0.350
	Sig. (2-tailed)		0.000
	N	199	199
STROKE	Pearson correlation	0.350	1
	Sig. (2-tailed)	0.000	
	N	199	199

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

$p < 0.01$). This finding suggests a strong correlation between the Grit scale scores and the Stroke scale scores. Considering the coefficient of determination ($r^2 = 0.12$), it can be said that 12% of the total variance (variability) in the Grit scale score is due to the Stroke scale score (Table 2).

Research Question 2: Do the Stroke scale scores of the individuals show a significant difference according to the Grouped Grit Status (Low, Medium, and High)?

Within the framework of the analysis of the results, it is seen that the stroke levels of the people show a significant difference according to their grit status [$F(2-196) = 12.94$, $p < 0.01$]. In other words, stroke levels vary significantly according to the grit status. When we look at the results of the Scheffe test, which was performed to determine between which groups the differences between the grit groups were, we found that the mean of low stroke ($X = 2.06$) is lower than means of medium stroke ($X = 2.46$) and high stroke ($X = 2.69$). This finding shows that with the increase in stroke levels of the people, their grit status also increases.

Research Question 3: Are there any effects of stroke components (verbal, non-verbal, valuing, and activities) on grit conditions?

An ordinal logistic regression analysis of link function, logit, was used to determine the effect of stroke components (verbal, non-verbal, valuing, and activities) on the grit state. The results of the parallel curves assumption of the ordinal logistic regression model are given in Table 3. The results in the table reveal that the regression coefficients estimated within the framework of the regression model structured with the logit, the link function, are the same in each category of the dependent variable and the parallel curves assumption is satisfied ($p > 0.05$).

Table 4 also includes the Pearson Chi-square fitting test of the model to demonstrate the suitability of the structured model. When the findings related to the test in question are examined in Table 4, it is seen that the logit-linked ordinal logistic regression model is appropriate ($p = 0.35 > 0.05$). On the other hand, the pseudo R^2 values that give information about the relationship between the dependent variable (grit state) and independent variables (verbal, non-verbal, valuing, and activities) were found as Cox-Snell (0.13), Nagelkerke (0.15), and McFadden (0.07). Here, the pseudo R^2 values indicate that the stroke components poorly explain the variability in the grit state.

TABLE 2 ANOVA results of individuals' stroke scale scores according to grouped grit status (low, medium, high).

Source of variance	Sum of squares	Df	Mean square	F	P	Significant difference
Between groups	10.05	2	5.02	12.94	0.000	Low-Medium
Within groups	76.07	196	0.39			Low-High
Total	86.12	198				

TABLE 3 Test of parallel lines.*

Model	-2 Log likelihood	Chi-square	Df	Sig.
Null hypothesis	382.09			
General	379.57	2.52	4	0.64

The null hypothesis states that the location parameters (slope coefficients) are the same across response categories. *Link function: Logit.

TABLE 4 The results of the fitting test of the model.

Model	Ki-kare	Serbestlik derecesi	P-değeri
Pearson	388.22	378	0.35
Deviance	376.55	378	0.51

Link function: Logit.

Parameter estimates, standard errors and *p* values of the variables in the model are given in Table 5. As a result of the logit-linked ordinal logistic regression analysis resulted in 2 threshold values calculated in the model being statistically significant. These threshold values are used to calculate the probability values of different dependent variable categories.

As seen in Table 5, non-verbal stroke in the model was the only explanatory variable statistically affecting the grit status. The predicted parameter value of the non-verbal stroke variable, which has a statistically significant effect on the dependent variable, has a positive sign.

When the value of the non-verbal stroke variable, whose estimated parameter value is statistically significant and has a positive sign, is increased by one unit, it will cause an increase in the grit level as much as the parameter value it has. In other words, when the non-verbal stroke score increases by one unit, the grit level will increase by 0.745.

Discussions

The findings indicate that the relationship between the Grit scale score and the Stroke scale score is moderate, positive, and statistically significant. This implies that when the students' levels of grit are high, so are their levels of stroke. This finding is consistent with those of Qiao (2022), who claims that a positive psychological quality like grit has a positive relationship with stroke based on earlier research. In other words, students feel motivated and positive about the learning process when the support they get from their teachers matches

TABLE 5 Estimated parameter values and significance test results of logit-linked ordinal logistic regression model.

		Estimate	Std. error	Wald	df	Sig.
Threshold	[GRIT = 1,00]	1.731	0.671	6.644	1	0.01
	[GRIT = 2,00]	3.846	0.721	28.498	1	0
Location	Verbal	-0.053	0.259	0.041	1	0.839
	Non_Verbal	0.745	0.282	6.999	1	0.008
	Valuing	-0.01	0.295	0.001	1	0.974
	Activities	0.51	0.265	3.694	1	0.055

their grit. Additionally, this supports the findings of Yuan (2022) and Shen and Guo (2022). Therefore, it is not surprising that researchers advocate for the implementation of activities that increase grit.

The second reasearch question investigated whether the Stroke scale scores of the individuals differed significantly according on their Grouped Grit Status (Low, Medium, and High). The results of the investigation suggest that people's stroke levels differ significantly depending on their grit status. This result indicates that when people's stroke levels rise, so does their grit. This result was in line with our second hypothesis where it said that the Stroke scale scores of the individuals show a significant difference according to the Grouped Grit Status. This observation is consistent with the findings of Li and Dewaele (2021), who discovered that learners' grit changes and is not static. For example, if learners enjoy themselves and receive praise and encouragement, their grit is high. When students receive a negative stroke, their grit levels fall between low and medium. Yuan's (2022) results back up these findings that stroke and grit are associated. It is critical to recognise that reverse psychology should be avoided because it is not always effective. Giving positive feedback to learners encourages them to stay on their path and grow.

The final research question this paper addressed was whether stroke components (verbal, non-verbal, valuing, and activities) had any impact on grit conditions. Yes, there are consequences of stroke components (verbal, nonverbal, valuing, and activities) on grit conditions, according to the hypothesis for this inquiry. The idea was disproved since nonverbal strokes were the only ones that had an impact on grit levels. Smiles or frowns directed at students are nonverbal examples (Pishghadam and Khajavy, 2014). This finding is similar to that of Gholamrezaee and Ghanizadeh (2018), who discovered that nonverbal stroke is more helpful than the other components of stroke in assisting learners in overcoming the challenges they confront during the learning process. Derakhshan

et al.'s (2022) study emphasises the superiority of the nonverbal stroke component. These findings indicate that teachers and educators must be well-equipped with all of the necessary information on body language and be psychologically prepared to interact with students in ways other than vocally.

The findings of this work confirm the importance of positive psychology, such as grit, shown in prior research. Duckworth et al. (2007) have long emphasised that grit must be fostered because it is one of the most important predictors of success. When instructors focus on encouraging students, their grit increases and they become more driven than ever to succeed. Grit, in turn, influences the other components of success and longevity. This tells us “none of the interacting variables is entirely stable and that they influence each other” (Li and Dewaele, 2021). As a result, it is critical for future studies to include multiple aspects when studying grit, as it can vary based on the parameters considered. Dewaele and Thirtle (2009), for example, suggest that an individual's grittiness is influenced by his or her environment, either favourably or adversely.

The present paper has some drawbacks. For starters, as participants in the questionnaire survey self-reported their responses, social desirability might slightly skew their responses. Additionally, while character traits like grit are universal, they may be more highly appreciated and supported in other cultures. As a result, they may take on a slightly different significance when it comes to influencing the emotions and conduct of FL learners. Although the general impacts of grit appear to be universal, we cannot rule out cultural variations.

Conclusion

As stated at the commencement of this study, positive psychology has gained significant attraction in the twenty-first century. Grit is a component of positive psychology that has garnered additional attention. Considering grit, particularly L2-grit, is such a new notion, it provides researchers with several research opportunities. Students' stroke is also a novel idea that gained prominence following the development and validation of its scale. However, the relationship between L2-grit levels and students' stroke was not thoroughly investigated; thus, this work was deemed necessary to address the research gap.

The current study supported earlier findings that grit can alter and can either favourably or adversely correlate with other variables. It was discovered that the L2-grit scale scores and the Stroke scale score have a positive correlation. Additionally, it was discovered that individuals with high, medium or low levels of grit have significantly different stroke rates than those with lower levels. Finally, it was discovered that only nonverbal strokes had a substantial effect on grit levels.

To conclude, this article provides additional proof of the value of grit in the learning process. It also provides valuable information on the linkage between L2-grit and students' stroke, which should lead to further research in diverse circumstances.

Pedagogical implications

The findings of the current study have pedagogical implications for EFL instructors and institutions. First of all, it is clear how important grit is and how it affects students' abilities; as a result, it is crucial that educators and institutions encourage grit. The unwillingness to communicate is one issue that EFL students encounter (Lan et al., 2021). Teachers must inspire their students to face their fears and begin speaking the L2 in order to succeed. Grit “correlates with motivation and other constructs such as self-efficacy, resilience, and hardiness,” claim Gyamfi and Lai (2020). Instead of spoon-feeding students everything, EFL teachers and institutions can include instructions on how important effort is in learning a new language.

Additionally, the results of the current study offer language learners helpful advice on how to approach the challenging language learning process (Wang et al., 2021). It encourages students to stop asking common questions like, “How do I learn English,” as by asking this question, students are looking for short cuts. Students of language will value patience and begin approaching the process with an open mind rather than rushing everything once they learn about grit and how it is “passion and perseverance for long-term goals.”

Data availability statement

The original contributions presented in the study are included in the article/Supplementary material, further inquiries can be directed to the corresponding author.

Ethics statement

The studies involving human participants were reviewed and approved by the Institute of Graduate Studies and Research Education and Graduate Sciences Center. The patients/participants provided their written informed consent to participate in this study.

Author contributions

DM, BM, and YK contributed to the conception and design of the study and wrote sections of the manuscript. DM organized the database and wrote the first draft of the manuscript. BM and YK performed the statistical analysis. All authors contributed to the article and approved the submitted version.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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A study on the effects of language and visual art integrated teaching on language learning performance and satisfaction of ethnic minority students in China

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Innovative technological products are present in students' environments. Information explosion and popularity are affecting their thoughts, and there is a large amount of information fuel in life through the Internet, television, movies, and advertisements. This phenomenon transforms reading from pure words into image. The current study was conducted using an experimental design model. A total of 188 ethnic minority students in the Hebei Province participated in the experimental study. The experimental group went through language and visual art integrated instruction, while the control group underwent traditional teaching. The experimental study lasted for 20 weeks (3 h per week). The research results showed that (1) spoken and written artistic conception was displayed through artistic expression. Ethnic minority students' differences in language skills and artistic expression were found to be the major factors that were effective in the production process. These aspects made the work richer and even more diversified. (2) After joining the classes and covering several lessons, ethnic minority students were found to be getting increasingly better in terms of integrating art vocabulary into their conversation. (3) Language and visual art integrated teaching input was a story content, which was received through "listening", while the outputs were individual opinions through "speaking". Their thoughts were presented through "painting". The creation process operated in the brain and reflected differences in terms of their thinking skills, vocabulary organizational skills, language use, and creativity. Based on the results, this study is expected to improve the language proficiency of ethnic minority students, enhance their artistic culture, and pave the way for their understanding and attitude toward language and literature.

KEYWORDS

language teaching, visual art, language learning performance, language satisfaction, curriculum and environment

Introduction

Technology development has brought about many drastic changes in the daily life of people, especially students, in the 21st century. Innovative technological products have taken the place of book reading in students' life. Information explosion and popularity are influencing their thoughts, and there is a large amount of information fuel in life through the Internet, television, movies, and advertisements. This phenomenon transforms reading from pure language and text into images (Hadi et al., 2021). With a view to sparing time for nurturing these visual activities, the use of language by students is consequently gradually getting reduced in the process. When the communication function of a language is replaced by pictures, children gradually ignore the information delivery function of the language. Language exchange nowadays is mostly limited by language use. It has been discovered that ethnic minority students have an insufficient language learning approach. Their concern regarding language words and sentences is also limited, which leads to a larger gap between them and their peers in the classroom. Their use of ambiguous language is weaker than the language spoken by urban students. It has been discovered that such a condition is common owing to the boom in technological products. Strong and figurative visual images replace words and sentences or articles, which can be comprehended after careful thinking. Ethnic minority students lose patience to reach that mental state so that they can learn efficiently from written works. On the contrary, they expect a quick input of visual, auditory, and sensory stimulation. They are poor at using language skills both to interpret their ideas and to maintain interpersonal communication. This is because of the emotional release and comprehension frustration that act as obstacles in the personal development process of ethnic minority students. Considering the above situations, it is important to integrate language teaching into the art education curriculum to open a learning opportunity for both art and language for ethnic minority students. This ethnic student-friendly approach can enable students to explore the language and literature through arts while deepening the learning of art through the use of language and literature. As a result, a win-win situation is achieved in artistic expression ability and language ability (Yundayani et al., 2019). The sensory stimulation of art in terms of multiple cultures leads ethnic minority students to feel and experience abstract theories and use art as a mediator to connect knowledge, increase the depth of learning, and instill in them the spirit of integrity. These changes in life, as a result, enable ethnic students to establish a connection with experience, life, and society, which has multiple aspects. Moreover, innovative thinking has also been encouraged to focus on various issues in the environment (Mayer et al., 2020). This point of view perceives art as the tool and medium that connects language

and literature and uses art as an instrument. Besides, the essential value of art should be taken into consideration. For this reason, subject-based art education, which includes aesthetic experience and life experience in the visual art language and literature integrated curriculum, is proposed in this study. In addition, this study discusses the effect of language and visual art integrated teaching on students' language learning performance and satisfaction. It should be indicated that making language and art a part of ethnic minority students' life experience is considered important. These aspects provide an opportunity to discuss the effect of language and visual art integrated teaching on ethnic minority students' language learning performance and satisfaction. It is expected that the results of this study can help improve the language proficiency of ethnic minority students and enhance their artistic culture. It is also expected that this study helps them to develop an understanding and inculcate a positive attitude toward language and literature. In addition, this study is expected to contribute to their knowledge and culture of art, as well as feelings and experiences in life.

Literature review

Language is an instrument that provides communication and a comprehensive subject; therefore, an effective language teaching approach requires integrated design and application (Stezycka and Etherington, 2020). The current society presents an environment with cultural diversity. In this environment, the coexistence of multiethnic languages and cultures possesses a potential for both harmony and troubles. The current education pattern faces the issue of including diverse student groups, and the family members of students also contain individuals from different cultural backgrounds in their family group itself. Single language teaching can no longer meet the requirements of all students. The development and evolutionary process of language has enriched the words with a variety of meanings with historical backgrounds. Each word presents the development and change in symbolic, phonetic, and literal meanings. Words are also evolved from pictures, and the relationship between pictogram and character provides clues to this process (Svenningsson et al., 2022). Different languages and cultures have their unique brilliance that it is necessary to keep the respectful attitude to explore a distinct culture. Arts is a field based on multicultural sensory stimulation, enabling the students to experience abstract theories with actual feelings. Students should also consider arts as the media for linking knowledge to enhance learning depth, width, and integrity. As a result of these explicable reasons, arts are intricately connected with students' experience, life, and society they live in and deal with various issues in the entire life environment from multiple perspectives and innovative

thinking (Sunra-La Sunra et al., 2020). Such a point of view takes arts as a tool and medium to link language. It is the instrumental value of language that takes care of the essential value of arts.

Gao et al. (2019) considered language and visual art integrated teaching as an improved teaching experience. Knowledge being integrated by instructors allowed students to completely grasp the basics of the curriculum. Applying an intradisciplinary or interdisciplinary curriculum enables the establishment of a connection between language and arts. In addition, it contributes to inform students about the two fields together and allows students to gain experience and find out the connections between them. Even though students cannot successfully find the connecting point at the time, they can accumulate adequate knowledge for self-awareness in the future. Preece and Marshall (2020) mentioned that, in addition to visual art, other subjects were covered in the language and visual art integrated instruction model. The art works and students' works are placed in the social, cultural, historical, and artistic aesthetic context. This is because the meaning of a work can be reinforced through the level of relationship with other art works, objects, artificial works, and events in other subjects. These events include various art-related fields such as learning art creation, art history, aesthetics, and art criticism. Besides, they attempted to affect and even generalize the events to other relevant subjects based on visual art education (Brown et al., 2020). Santos and Castro (2021) stated that language and visual art integrated teaching, along with different curriculum goals and through the adjustment of teaching content, can help achieve the learning outcome more effectively. The use of art instruction to support the other subjects in achieving subject-specific and cross-curricular learning objectives can explain the integration and recognition of issues in students' lives. Language and visual art integrated instruction, with an art-based integrated curriculum, uses art as a medium. In addition, art concept, aesthetic elements, and art resource were also used to mediate, activate, assist, and integrate learning in other fields to present language through paintings and to support the expression in paintings (Mayer et al., 2020). The word has a rich and unlimited meaning that gradually affects the students' learning performance (Rahmatika et al., 2021). Accordingly, the following hypothesis is proposed in this study.

H1: Language and visual art integrated instruction has significant effects on language satisfaction.

The contents and styles of language and literature application have become an instrument for recording the ideology. Language and literature, as a comprehensive subject, provide a tool that can stimulate thinking and deliver thoughts. They can also help students construct logic, practice personality education, transmit history, and improve communication through listening and reading. Therefore, integrated design and

application are necessary for language and literature instruction. Art education emphasizes art perception to promote the perception of aesthetics in life, appreciate the beauty of art work, and develop artistic creation through awareness, as well as integrate aesthetics into daily life (Choe et al., 2019). Language and visual art are two different creation styles. After thousand years of accumulation, collection, change, and transformation, they are presented in various formats but have close relationships (Schmid et al., 2021). Johann and Bülow (2019) considered the art work as independent from the objective world and the subjective mind, so that it is a creation in the true sense. If it were simply the deviant form of an object, the spoken language could reveal the way to store information. People used spoken language to record anecdotes that were passed down from generation to generation and became stories that spread widely. Spoken language did not leave behind material products but was passed down through memory and served as a way for people to reflect (Noyan Erbaş et al., 2021). Image also provides the opportunity to interpret the connotation of the word and reveals the author's thoughts through symbols, metaphors, hints, colors, and compositions in the image, so visual communication is more shocking and effective than literature. Consequently, language teaching that integrates visual art can significantly affect students' satisfaction in language learning (Purwanto et al., 2020). Therefore, the following hypothesis is proposed in this study.

H2: Language and visual art integrated instruction has significant effects on language learning performance.

Su (2019) considered the preference for different behaviors, attitudes, and feelings toward learning activities as learning satisfaction. Students with higher learning satisfaction showed better learning outcomes, which therefore became the most important objective of differentiated learning. Copur-Gencturk and Thacker (2021) discussed the relationships between learning satisfaction and learning outcomes and found that learning satisfaction had a significant positive effect on learning outcomes. Shao et al. (2019) studied the relationships between learning satisfaction and learning outcomes of sports talent class students in elementary schools and found out moderately positive correlations between learning satisfaction and learning outcomes of the participants in Taipei City and New Taipei City. Kaliisa et al. (2019) investigated learning satisfaction and learning success of high school students in swimming classes and found significant positive correlations between learning satisfaction and learning outcomes of students in swimming classes. Preece (2019) used G6 as an example to investigate e-book learning outcomes and learning satisfaction and found out the remarkably positive correlations. Therefore, the following hypothesis is proposed in this study.

H3: Language satisfaction has significant positive effects on language learning performance.

Methodology

Measurement of research variable

Language satisfaction

Following the study of Wang et al. (2021), in this study, we considered two factors of learning satisfaction as teacher's instruction and curriculum and environment.

1. Teacher's instruction: Teachers' professional knowledge, ability to solve students' problems, preparation before lessons, teaching styles, teaching attitude, interaction with students, and understanding of students' individual needs can improve students' learning satisfaction.
2. Curriculum and environment: Learners' interests in the course content and their behaviors during the learning process improve their positive attitude.

Language learning performance

Following the study of Fang et al. (2022), factors in students' learning outcomes were proposed as follows.

1. Instructional factors: These include peer relationships, student-teacher interaction, classroom equipment, learning environment, family background, and community's cultural values.
2. Environmental factors: These factors include teaching style, teaching hour, curriculum design, material content, and teachers' organization and lecturing ability.

Research object and sampling data

There are 55 different ethnic minorities in Hebei Province, China, with a population of 2.96 million. This constitutes about 4.27% of the total population in the province and is ranked ninth nationally. Native ethnic minorities include the Manchus, the Hui people, the Mongolians, and the Koreans. Ethnic minorities in the Hebei Province are distributed in urban and rural areas. Among them, 83% live in villages, while 17% of them live in cities. Several native ethnic minorities inhabit a certain region, for instance, Manchu reside mainly in Chengde, Qinhuangdao, Zunhua of Tangshan, and Yi County of Baoding. Similarly, Hui people reside mainly in villages and towns in Cangzhou and Langfang as well as in some larger towns in other cities. Most ethnic minorities inhabit in poor areas with severe natural conditions and low fertility of the soil. For instance, they live in Taihang Mountains, high and cold areas on a dam, and lower areas with alkali soil along Heilongjiang River. Ethnic minority students in China have worse language learning and artistic culture achievement compared to urban students. For this reason, the experimental design model with language and

visual art integrated teaching for ethnic minority students was adopted in this study. It is expected to understand train ethnic minority students' language proficiency, improve their level of artistic culture, improve their understanding and feeling of language and literature, as well as their knowledge and culture of art.

A total of 188 ethnic minority students in Hebei Province participated in the experimental study. The experimental group went through language and visual art integrated instruction, while the control group maintained traditional teaching. The experimental study lasted 20 weeks (3 h per week). SPSS Software was used for data analysis. Factor analysis, reliability analysis, regression analysis, and analysis of variance were conducted to test the hypotheses.

Research process

Creating a research gap and finding an appropriate sample is of extreme importance in the research process. According to the research gap, a literature review and analysis were conducted. Based on these theories, the design of the teaching unit was drafted, and the course contents were prepared for the teaching purpose. Besides, students' in-class work and creation processes were observed, recorded, and collected in the teaching activity. On the collected data, unit review and reflection were done after the end of each unit. This enabled teachers to revise the successive teaching activities. Students were given the questionnaire survey after the end of the course. With this, it was aimed to analyze the language satisfaction and the language learning performance of the students.

The teaching experiment was implemented for 20 weeks, from January to May 2022. The course descriptions and evaluation standards were explained in the first week. The language teaching integrated with visual arts was conducted as scheduled from the second week, and the general revision and the questionnaire survey were conducted in the last week. The teaching contents included "understanding the development process of impressionism and announcing the viewpoints of impressionist works", "creating personal work based on the principles of impressionism", "enhancing the learning effectiveness of art creation through language and improving self-confidence and creating positive experience", "presenting the artistic conception or content of language with visual creation", "observing the relations between affairs in daily life and oneself with visual performance", "enhancing the ability to appreciate and comment personal and others' works through language ability", and "enhancing the art and language performance through teaching activity for experience accumulation". These contents were designed to match the teaching objectives. With a traditional teaching model, the course explanation and evaluation standards were also conducted in the first week. The course was conducted

TABLE 1 Variance analysis of language and visual art integrated instruction in language satisfaction.

Variable		F	P-value	Scheffe <i>post-hoc</i>
Language and visual art integrated instruction	Teacher's instruction	17.534	0.000*	Language and visual art integrated instruction (4.12) > traditional teaching model (3.34)
	Curriculum and environment	22.893	0.000*	Language and visual art integrated instruction (4.05) > traditional teaching model (3.51)

*p < 0.05.

TABLE 2 Variance analysis of language and visual art integrated instruction in language learning performance.

Variable		F	P-value	Scheffe <i>post-hoc</i>
Language and visual art integrated instruction	Instructional factors	19.732	0.000*	Language and visual art integrated instruction (4.23) > traditional teaching model (3.56)
	Environmental factors	25.467	0.000*	Language and visual art integrated instruction (4.17) > traditional teaching model (3.48)

*p < 0.05.

as mentioned in the schedule from the second week, and the general revision and questionnaire survey were implemented in the last week. The teaching content focuses on enhancing listening, speaking, reading, and writing skills in the field of language. As in traditional teaching, teachers followed the principles of didactic teaching.

Data collection and analysis

The research data were collected with a questionnaire survey as well as the instructor's teaching practice through in-class video and tape recording and teacher's observation for the analysis.

Quantitative research, a structure-oriented measurement method for a specific phenomenon, considers that any individual, organizational, or social truth be defined and manipulated (Miller and Brewer, 2003). The researcher established the observed social phenomena or human behaviors' logic and presented with numbers to explore the relations through statistics. This enabled the social fact to be objectively and systematically studied to understand the cause-and-effect among variables (Outhwaite and Turner, 2007). With these features in mind, it was decided that the quantitative research conforms to the objectives of this study that is used for this study. Besides, the questionnaire survey results could be easily quantified. A questionnaire survey is a structured survey, with a fixed form of expression, questioning orders, and the answering method of the questions. Besides, it is a kind of text exchange. Accordingly, nobody, including the researchers or surveyors too, can interfere with the survey with subjective bias. Since it was reported that the statistical results can be quantified (Outhwaite and Turner, 2007), the quantitative research method was utilized for this study, and a questionnaire survey was used.

Analysis results

Reliability and validity analysis

The factor analysis was used and two factors, namely, "teacher's instruction" (eigenvalue = 2.561, $\alpha = 0.87$) and "curriculum & environment" (eigenvalue = 2.192, $\alpha = 0.89$), were extracted from the language satisfaction construct. The cumulative covariance explained was found as 75.262%.

The factor analysis for the language learning performance construct generated two factors: "instructional factors" (eigenvalue = 4.327, $\alpha = 0.93$) and "environmental factors" (eigenvalue = 3.183, $\alpha = 0.95$). The cumulative covariance was found to be 77.128%.

Effects of language and visual art integrated instruction on language satisfaction and language learning performance

Analysis of variance of language visual art integrated instruction in language satisfaction

The ANOVA, which was conducted to discuss the difference of teaching model in language satisfaction (Table 1), showed significant differences between teaching model and teacher's instruction. Based on teachers' teaching, language teaching combined with visual arts (4.12) was found to have a higher score than the traditional teaching mode (3.34). Similarly, based on curriculum and environment, the integration of language teaching with visual arts (4.05) was found to have a higher score

TABLE 3 Analysis of language satisfaction to language learning performance.

Dependent variable→	Language learning performance			
Independent variable↓	Instructional factors		Environmental factors	
Language satisfaction	B	P	β	P
Teacher's instruction	2.175**	0.000	2.394**	0.000
Curriculum and environment	2.241**	0.000	2.481**	0.000
F	37.438	42.596		
Significance	0.000***	0.000***		
R2	0.266	0.334		
Adjusted R2	0.247	0.326		

*p < 0.05, **p < 0.01, ***p < 0.001. Data source: Self-organized in this study.

than the traditional teaching mode (3.51). Therefore, H1 was supported.

ANOVA of language and visual art integrated instruction in language learning performance

The ANOVA was implemented to discuss the difference between teaching model and language learning performance (Table 2). The results showed significant differences in terms of the teaching model in language learning performance. In the integration of language teaching with visual arts as compared to traditional teaching mode, language teaching with visual arts (4.23) was found to be higher on teaching factors than the traditional teaching mode (3.56). Similarly, in the integration of language teaching with visual arts as compared to traditional teaching mode, the integration of language teaching with visual arts (4.17) was found to be higher on environmental factors than the traditional teaching mode (3.48). In this respect, it can be stated that H2 was supported.

Correlation analysis of language satisfaction and language learning performance

Correlation analysis of language satisfaction and instructional factors

To test H3, a correlation analysis was conducted (Table 3). The results revealed significant positive effects of teacher's instruction ($\beta = 2.175^{**}$) and curriculum and environment ($\beta = 2.241^{**}$) on instructional factors.

Correlation analysis of language satisfaction and environmental factors

To test H3, a correlation analysis was conducted (Table 3). The results showed significant positive effects of teacher's

instruction ($\beta = 2.394^{**}$) and curriculum and environment ($\beta = 2.481^{**}$) on environmental factors. Therefore, H3 was supported.

Discussion

The research results revealed that, by using language and visual art integrated instruction, we can guide students to discuss the concept of impressionism (Su and Foulger, 2019). Moreover, this approach considers ethnic minority students as the subjects of the curriculum and emphasizes individual natural development while improving the educational value of art activity. The instructors select topics for integrating into the curriculum from various perspectives in order to contribute to ethnic minority students' development in various dimensions during the participation in the course (Tseng et al., 2019). The research hypothesis, namely H1: Language and visual art integrated instruction has significant effects on language satisfaction, is supported, which conforms to the research results of Hasan et al. (2021), Rahmatika et al. (2021), and Santos and Castro (2021). The integrated curriculum systematically integrates language and visual art knowledge for ethnic minority students to enable them to completely grasp the content. The teaching process improves the ethnic minority students' language ability and deepens their knowledge of the culture of art (van Lancker and Parolin, 2020). The experimental instruction analyzes ethnic minority students' art and language performance during their participation in the language and visual art integrated course. The research hypothesis, namely H2: Language and visual art integrated instruction has significant effects on language learning performance, is supported, conforming to the research results of Purwanto et al. (2020), Noyan Erbaş et al. (2021), and Schmid et al. (2021).The instructor particularly paid attention to the extension and correlation of teaching in the curriculum design to ensure a connection between units. It promotes

ethnic minority students' learning motivation using the familiar elements with the new content in the course considering their prior knowledge. Regarding the use of media and art vocabulary, language was integrated into ethnic minority students' daily used word files and their painting skills were also advanced through repeated practice (Verkasalo et al., 2021). Language and literature activity was also integrated into the curriculum. The appreciation of language and story was inculcated in different ways to deliver the word meaning through artistic creation. Story and personal experience are connected with unlimited performance to apply to the instruction to observe ethnic minority students' learning and development in various dimensions. The research hypothesis, namely H3: Language satisfaction has significant positive effects on language learning performance, is supported, conforming to the research results of Kaliisa et al. (2019), Preece (2019), and Copur-Gencturk and Thacker (2021). It is evident that the course diversity of language teaching combining visual arts was favored by students. Different from monotonous basic subjects, students preferred free, flexible, and limitless creation courses. An integrated teaching of language and visual arts was favored by students, and it encourages students' willingness to learn both fields.

Conclusion

The experimental result revealed that language and visual art integrated teaching (4.12) was found to be higher than the traditional teaching mode (3.34) on teachers' teaching, and language and visual arts' integration (4.05) was found to be higher than that taught by traditional teaching mode (3.51) on curriculum and environment. Therefore, H1 is supported: Language and visual art integrated instruction has significant effects on language satisfaction.

Language teaching combined with visual arts (4.23) was found to be higher on teaching factors than the traditional teaching mode (3.56), and language and visual arts integration (4.17) was found to be higher on environmental factors than the traditional teaching mode (3.48). Therefore, H2 is supported: Language and visual art integrated instruction has significant effects on language learning performance.

The correlation analysis results of language satisfaction and teaching factors showed notable and positive effects of teacher's teaching ($\beta = 2.175^{**}$) and curriculum and environment ($\beta = 2.241^{**}$) on teaching factors. In addition, the correlation analysis results of language satisfaction and teaching factors showed significant and positive effects of teacher's teaching ($\beta = 2.394^{**}$) and curriculum and environment ($\beta = 2.481^{**}$) on environmental factors. The research hypothesis, namely H3 is, therefore, supported: Language satisfaction has significant positive effects on language learning performance.

The experiment revealed that language and visual art integrated teaching provides input through listening and reading, without the assistance of pictures. The composition of pictures was stimulated by language and comprehended, induced, and transformed into individually perceived concepts (Qiu et al., 2021). Ethnic minority students were trained in terms of concentration, quick thinking, ideation, memory, and emotional perception through listening to ensure proper judgment and analysis in the listening process. Words were transformed into specific images, feelings, and thoughts during reading comprehension. As a result, their thinking and imagination to comprehend the story content and integrate with artistic expression for the final objective of self-actualization was reached (Yang et al., 2020). The artistic concept of language and word was presented through an artistic expression. The differences in language proficiency and artistic expression of ethnic minority students are the factors of the production process. These aspects led the work to be richer and more diversified (Buttler, 2020). Teachers encourage ethnic minority students to deliver their personal opinions with art vocabulary and integrate art terminology into the language and discussion so that their individual presentation is contextual and full of affection. Teachers largely used classroom for demonstration, and ethnic minority students started to add terminology into the language. After showing their improvement in various lessons, ethnic minority students started to get better and better to integrate art vocabulary into language conversation. Language and visual art integrated teaching input was presented *via* the story content through "listening". The output regarding their personal opinions was in the form of "speaking" and "painting". Ethnic minority students absorbed external information with these three actions for internalization and organization. They interpreted the course content with their personal opinions and previous experience and transformed it into language and painting for output. The creation process was operated in the brain. Ethnic minority students were trained and was asked to observe the transformation and the reflected thinking skills, language organizational skills, language use skills, and creation skills' outcomes.

Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

Ethics statement

The present study was conducted in accordance with the recommendations of the Ethics Committee of the Minzu

University of China, with written informed consent being obtained from all the participants. All the participants were asked to read and approve the ethical consent form before participating in the present study. The participants were also asked to follow the guidelines mentioned in the research form. The research protocol was approved by the Ethics Committee of the Minzu University of China.

Author contributions

YZ performed the initial analyses and wrote the manuscript. SJ assisted in the data collection and data analysis. All authors revised and approved the submitted version of the manuscript.

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Online in-class vs. out-of-class flipped learning models in English as foreign language writing classes

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Flipped learning models are considered as important elements of English as a foreign language (EFL) writing courses in order to advance the EFL learners' writing skills. Significantly, studies examining the efficacy of in-class and out-of-class writing models in flipped classroom settings when teaching online EFL writing courses are still of focus in the Turkish Cypriot context. This investigation aimed to examine the most efficient flipped learning model among the in-class vs. out-of-class writing models for the purpose of helping instructors to advance their EFL learners' writing achievement in an online writing setting. In addition, this study sorted to reveal the EFL learners' perceptions toward learning writing through in-class and out-of-class flipped learning writing models. A mixed methods research design was applied to achieve the aforementioned aims. Twenty-eight EFL learners studying at a private university's English Language Teaching department constituted the participants of this study. As the findings pointed out, the EFL learners in group A who wrote their essays in-class outperformed those in group B, who wrote their essays out-of-class. Moreover, it was found that the majority of the participants had more positive perceptions toward the in-class flipped classroom writing model. This study highlights that, better learner performances are achieved when the learners write during the class session online with the support of the instructor when implementing a flipped classroom model to teach EFL writing.

KEYWORDS

flipped classroom, in-class writing, out-of-class writing, traditional model of online writing, English as a foreign language learners, writing, perceptions

Introduction

Focusing on ways to improve English as a Foreign Language (EFL) learner's writing skill has been of focus, as writing is regarded as the most important skill that cannot be left behind in the instructional process (Khudhair, 2016). Writing is perceived of as a tool of creation that enables human beings to convey their ideas interactively for communicative goals as only with the help of writing can human beings transmit their ideas to a great

number of people (Koura and Zahran, 2017). Although writing is an indispensable part of the instructional process, it is the most complex skill, which is challenging to both learn and teach (Bukhari, 2016). Taking these aspects into account, a great deal of importance is given to enhancing the writing skills of the EFL learners in the North Cyprus context, as writing is considered as a fundamental skill that should be taken into consideration more than the other skills, with a view to having a better academic and professional life (Brooks, 2012; Bostanci and Çavuşoglu, 2018). In North Cyprus, EFL learners study a year of compulsory English at a preparatory school, where they take specific classes in English and continuously write in English, with the objective of boosting their academic literacy skills and meeting future personal and public expectations, depending on their language levels, as well as in line with the major subject they study (Turgut and Kayaoglu, 2015). On top of these, universities begin to hire qualified lecturers, lessen the number of learners in the classes and begin to embed technology in the instructional process with the goal of increasing the quality of education (Shapiro, 2015). It has also been found that recent technological developments have enabled new means of teaching by providing learners a comfortable, enjoyable, motivating and relaxing instructional atmosphere (Bishop and Verleger, 2013; Ekmekçi, 2017).

The implementation of a new technological innovation or developments in the field of EFL education could be carried out with the help of the flipped learning model. It is commonly used nowadays and is considered as an alternative way of teaching where learners are autonomous and responsible for their educational process (Abaeian and Samadi, 2016; Aidinlou et al., 2017; Alastuey and Galar, 2017; Ekmekçi, 2017). Primarily, flipped learning plays a significant role in the instructional process, as it enables the learners to analyse the course content even before attending the lesson through the presentation of instructional videos about the course content. This step is followed by activities that check the level of understanding of the learners regarding the course content. This model advances the efficient and common usage of technological innovations in an out-of-the-class environment, so as to fulfill the instructional objectives (El-Sawy, 2018). As a result, the writing process becomes even more individualized by the use of the flipped learning method (Ekmekçi, 2017). A flipped learning writing model could be an influential method of instruction to advance the writing achievement level of EFL learners, particularly, in the Turkish Cypriot context (Ekmekçi, 2017; Soltanpour and Valizadeh, 2017; Salem, 2018). The traditional model of flipped learning in an online writing lecture is considered as out-of-class writing, where the learners write their essays out of the lecture and produce their essays at their own pace (Ahmed and Asiksoy, 2018; Altas and Mede, 2021). Another flipped model of teaching writing is in-class writing, where the learners write in a class with the instructor's guidance and where the teachers have more chance to embolden individual learning, provide ontime feedback, correct the learners' misconceptions and help

the learners to practice their recent knowledge (Ping et al., 2019).

This study aimed to examine the most effective FLM for EFL learners of higher education by focalizing on the impacts of two different flipped learning models (FLMs), namely, in-class and out-of-class writing models. It further aimed at revealing the EFL learners' perceptions toward the implementation of these two models.

To achieve these objectives, the following questions were asked with a view to be answered:

- 1) Is there any significant difference among the EFL learners' writing performances, who were lectured with the in-class vs. out-of-class flipped learning models (FLMs)?
- 2) What are EFL learners' perceptions and preferences toward the in-class and out-of-class flipped learning models (FLMs) in writing courses?

Literature review

During the implementation of English as a foreign language (EFL) education process, among the four skills, namely, speaking, reading, listening, and writing, writing is perceived to be one of the major influential skills. A great amount of attention is paid to improve the writing skills of the learners, to enable them to reach a requisite proficiency level in written communication in the Turkish Cypriot context (Ekmekçi, 2017). In general, teaching writing in the EFL context is regarded as a challenging task, as it is not easy to form, organize and interpret the thoughts through meaningful messages (Al-Shaer, 2014; Suyanto, 2015; Febrijanto, 2016; Ningrum et al., 2016; Koura and Zahran, 2017). Nonetheless, there are a great deal of issues in EFL writing lectures, specifically in the North Cyprus context (Afrilyasanti et al., 2016; Koura and Zahran, 2017; Dimililer and Kurt, 2019). In the same way, another problem that can be observed in the writing process in this specific context pertains to time constraints, as the lecturers have to spend a majority of the lecture time to explain the instructions before beginning the writing task, thus, there is limited time left for the writing process itself (Bostanci and Sengul, 2018). The writing process is perceived as challenging, complex and problematic for the EFL learners (Mahnam and Nejadansari, 2012; Bostanci and Çavuşoglu, 2018). Considering these aspects, the lecturers should be encouraged to renew their educational methodologies and techniques, to decrease the number of problems and difficulties that may arise and should do their best to convert such learning sessions into more inspirational, motivating, enjoyable, and self-sufficient classes (Ekmekçi, 2017).

Technology-oriented educational methods and models are seen to boost EFL learners' active participation and attendance in the educational process, and advance their language learning

experiences (Salem, 2018). One way of implementing recent technological innovations in the educational process can be realized through flipped learning, which is a method that has gained attention in North Cyprus (Fraga and Harmon, 2014; Bostanci and Sengul, 2018; Salem, 2018). Flipped learning is an instructional methodology that puts emphasis on learner-oriented education and plays a significant role among many lecturers and researchers, all over the world (Güvenç, 2018). As the traditional flipped learning model is restricted with online video lectures and increased class time for in-class tasks and decreased time for in-class writing, it has been improved to authorize for several techniques and strategies that are convenient and suited to the requirements of separate fields, units, courses, and lectures (Kim, 2017). Thence, it creates a more comfortable and adaptable instructional atmosphere, as the EFL learners can acquire the information everywhere and every time they wish (Ekmekçi, 2017). The findings of flipped learning studies showed that flipped learning has the capability to assist instructors to advance their educational outcomes in the technology-integrated lecture (Aidinlou et al., 2017). Without any doubt, there is a substantial difference in the educational outcomes of the EFL learners who were lectured on flipped learning models (FLMs) and traditional educational strategies. It was also discovered that EFL learners who were taught in the flipped classroom-based lectures received higher grades than the EFL learners who were taught in traditional classes (Aidinlou et al., 2017). To summarize, utilizing flipped learning models (FLMs) in EFL classes increases learner outcomes (Suranakkharin, 2017).

In terms of learner preferences, learners preferred to be educated in a flipped learning-based environment, as it provides them the chance to take the authority of their personal learning process (Fraga and Harmon, 2014). Evidently, both the lecturers and EFL learners' attitudes toward the flipped learning process are positive (Alastuey and Galar, 2017). Flipped learning models (FLMs) can be considered as today's most appropriate instructional method for teaching writing to EFL learners (Hsieh et al., 2017; Güvenç, 2018; Öznacar et al., 2019). Flipped learning models in the writing process can be categorized into in-class and out-of-class that can be employed to respond to several pedagogical objectives (AbuSeileek and Qatawneh, 2013; Thakare, 2018).

Indeed, in-class writing enables the EFL learners to focus more on the writing process, organization of the essay and the thesis statement, while it pays less attention to the lexical items and mechanics of the language (Saed and Ghazali, 2017). Significantly, simultaneous learner and instruction presence is a must, as it fosters deeper and meaningful language learning with the presence of the instructor, peers and collaborative environment (Oztok et al., 2013; Perveen, 2016). In other words, the writing process occurs on time and it is considered as more expedient which enables the learners to be present in the classroom as "real" and "there" where the learners

are able to reach a mutual understanding (Oztok et al., 2013; Lowenthal et al., 2017). Particularly, in-class writing enables the learners to feel the sense of community, and it also provides ontime feedback which advances the level of motivation and keeps the learners engaged in the activities as a result of the instructor's and other learners' presence (Perveen, 2016). Furthermore, it contributes to the cognitive presence and the learners' positive attitudes toward the EFL learning process (Oztok et al., 2013).

In contrast to these, a majority of the learners avoid attending and participating in the classroom environment at a particular hour, and some of them have problems regarding technology and network connection, and some of them also have issues regarding the scheduling and time zone (Oztok et al., 2013; Lowenthal et al., 2017). Additionally, as it is agreed, there is less time to think and produce an essay in the classroom environment, as well as restricting the usage of outside-of-class resources (AbuSeileek and Qatawneh, 2013). As it is claimed, in-class writing can be supported with the help of facilities and materials such as discussion rooms, real-time chat or online meeting platforms (Huang and Hsiao, 2012). Conversely, as the stated issues and the lecture time are limited, some of the lecturers prefer to ask their learners to write their essays out of the instructional environment, as the majority of lecture time is spent in describing the explanations and instructions about the writing task, rather than giving time to the EFL learners to practice their writing skills (Chang, 2016; Lin and Hwang, 2018). Out-of-class writing can be reached at every time and everywhere, and enables reflection, critical thinking and deeper learning (Oztok et al., 2013; Lowenthal et al., 2017). As it happens at a delayed time, it does not enable real-time access for instructional objectives, whereas the time of learning depends on the learner preferences, which help the instructors to avoid any misbehavior in the classroom environment and embolden the multiple learning styles (Oztok et al., 2013). As it is believed, out-of-class writing is mainly preferred for reflective and higher order thinking activities. It also supports the constructivist-oriented instruction, as it enables the learners to log in and communicate whenever they want, depending on the time that is convenient to them. It also gives them an opportunity to learn and work at their own pace within a scheduled time frame, to think, respond, plan and use external resources (AbuSeileek and Qatawneh, 2013; Oztok et al., 2013; Lowenthal et al., 2017; Karaaslan et al., 2018). In addition, an out-of-class writing model can be supported with e-mails, discussion platforms, blogs, audio-, and video recordings and so on (Huang and Hsiao, 2012).

As it is underlined in the study of AbuSeileek and Qatawneh (2013), both in-class and out-of-class writing models enable the learners to increase their writing performances. In a similar manner, Shang (2017) found that, both in-class and out-of-class writing had a positive effect on the EFL learners'

writing abilities. Lowenthal and Dunlap (2017) suggested that, both in-class and out-of-class writing models should be used in writing classes, as they provide different advantages and disadvantages and affect the writing process in a different way. On top of these, although both in-class and out-of-class writing models help the learners to advance their writing skills, Saed and Ghazali (2017) proved that EFL learners had more positive attitudes toward the in-class writing model. As a result, as it is highlighted in the study of Oztok et al. (2013), the majority of their EFL learners prefer to write in-class, as it gives them more chance to collaborate with the class members and the instructor while writing. In contrast to these, the recent study of Bailey et al.'s (2020) indicated that that out-of-class writing had a positive impact on the learners' language skills.

Overall, both the in-class and out-of-class flipped classroom models maintain lifelong learning abilities and meaningful knowledge, rather than demanding the learners to memorize the knowledge for a specific time, and the instructors begin to instruct how to acquire the information besides only teaching the content in North Cyprus (Ahmed and Asiksoy, 2018; Sengul and Bostanci, 2021). Crucially, numerous investigators have paid attention to the flipped classroom, learner perceptions and different subject areas; however, none of the researchers have put emphasis on the effects of the in-class and out-of-class flipped classroom models on the EFL learners' writing improvement that fulfill the twenty-first century EFL learners' requirements by giving them a chance to engage in the tasks that help them to advance their abilities, such as critical thinking, problem solving, creative learning and communication (Ahmed, 2016; Sengul and Bostanci, 2021). More than these, EFL instructors faced with difficulties and failed to have an effective writing course based on online flipped classroom, as there is no study that had investigated the most appropriate and effective flipped classroom models among the in-class and out-of-class flipped classroom models for online writing course regarding the EFL learners' academic achievement in writing process at university-level EFL learning in North Cyprus (Ahmed, 2016; Sengul and Bostanci, 2021). In fact, this investigation is different from the previous researches, in that it purposed to flip EFL writing classes with different online flipped classroom models and encouraged courses with different flipped classroom formats and fill in the gaps regarding the implementation of different flipped classroom models, namely, in-class and out-of-class writing in online EFL writing courses at North Cyprus. Consequently, this study is innovative, as it provides a framework on how to design the writing courses based on the most convenient flipped classroom models in the online EFL writing context. It is essential, as it might encourage instructors and university personnel to implement the most appropriate flipped classroom model in EFL courses at North Cyprus and in the worldwide context to have a beneficial and effective online writing course.

Methodology

Research design and procedures

A mixed methods research design was implemented to effectively answer the research questions posed. Mixed methods employ both qualitative and quantitative data analysis and collection processes (Green, 2015).

Primarily, the investigation paid particular attention to the fourth-year English language (EFL) learners' written text analysis, to examine the impacts of the in-class vs. out-of-class flipped learning models (FLMs) on their writing performances. In both groups, where the in-class or out-of-class flipped classroom models were implemented, the same strategies, techniques, and procedures were utilized. The only difference was that one group wrote in a class hour with the help of the lecturer and the other group wrote at their own time and pace.

The following steps and procedures were employed. First, all the participant EFL learners in the class were asked to review the provided information and perform the provided activities related to each week's subject from the private university's flipped learning platform (online), before attending the online class through Google Meet. During the online class hour, all the participants completed the provided exercises related to each week's subject on Saturday's and after these processes, half of the learners (Group A) were asked to write their essays in-class, during an online class hour on Tuesdays and the other half of the learners were asked to write their essays out-of-class, whenever they preferred. Following this, all the participants sent their essays *via* e-mail to their peers (each week a different peer) for an indirect written corrective feedback and once they had made the necessary changes, the final essay was sent to the lecturer for lecturer's indirect written corrective feedback. The track changes and comments section on the Word processing document were implemented during the feedback process. Basically, the participants prepared two drafts before submitting their final products. The participants' final products were subjected to Turnitin plagiarism check before scores were set.

Learners were required to write five essay types in a period of 16 weeks including the midterm and final exam weeks and holidays. The essay types of the written texts could be arranged as follows: Task 1: Argumentative Essay, Task 2: Cause and Effect Essay, Task 3: Persuasive Essay, Task 4: Advantages and Disadvantages Essay, Task 5: Compare and Contrast Essay, midterm exam: Argumentative Essay and Cause and Effect Essay, and final exam: Persuasive Essay, Advantages and Disadvantages Essay, and Compare and Contrast Essay. Two weeks were provided for each essay type. Learners were required to write half of the essay in 1 week and the other half in the following week. Moreover, these written texts were graded out of 10 by the researcher and an ELT instructor, in line with the created essay writing criteria. In the examinations, two different essay types and two different essay topics for these types were

presented for the participants to select. Learners had an hour's duration to complete the examinations online.

Participants and sampling

Convenience sampling was employed, as the data were gathered among the EFL learners who were taking part in the course. Convenience sampling is a kind of non-probability sampling, which involves the participants from the target audience who fulfill specific convenient criteria, such as effortless reachability, geographic accessibility, accessibility at a particular time or the voluntariness to take part (Etikan et al., 2016). In particular, the participants were upper-intermediate level EFL learners who were taking the fourth-year writing course as an elective. They were divided into two groups as equally and randomly among the classroom members who were conveniently available to participate in the study without making any discrimination such as learning style, preference and so on.

The data were obtained during the 2021–2022 spring semester, from 28 EFL learners majoring in the Department of English Language Teaching at a private university, in North Cyprus. Fourteen of the participants formed Group A and 14 formed Group B. The participants in group A had an online writing lecture in a flipped learning writing class where the in-class writing model was utilized, whereas participants in group B had an online writing lecture in a flipped learning writing class where the out-of-class writing model was utilized.

Data collection and analysis

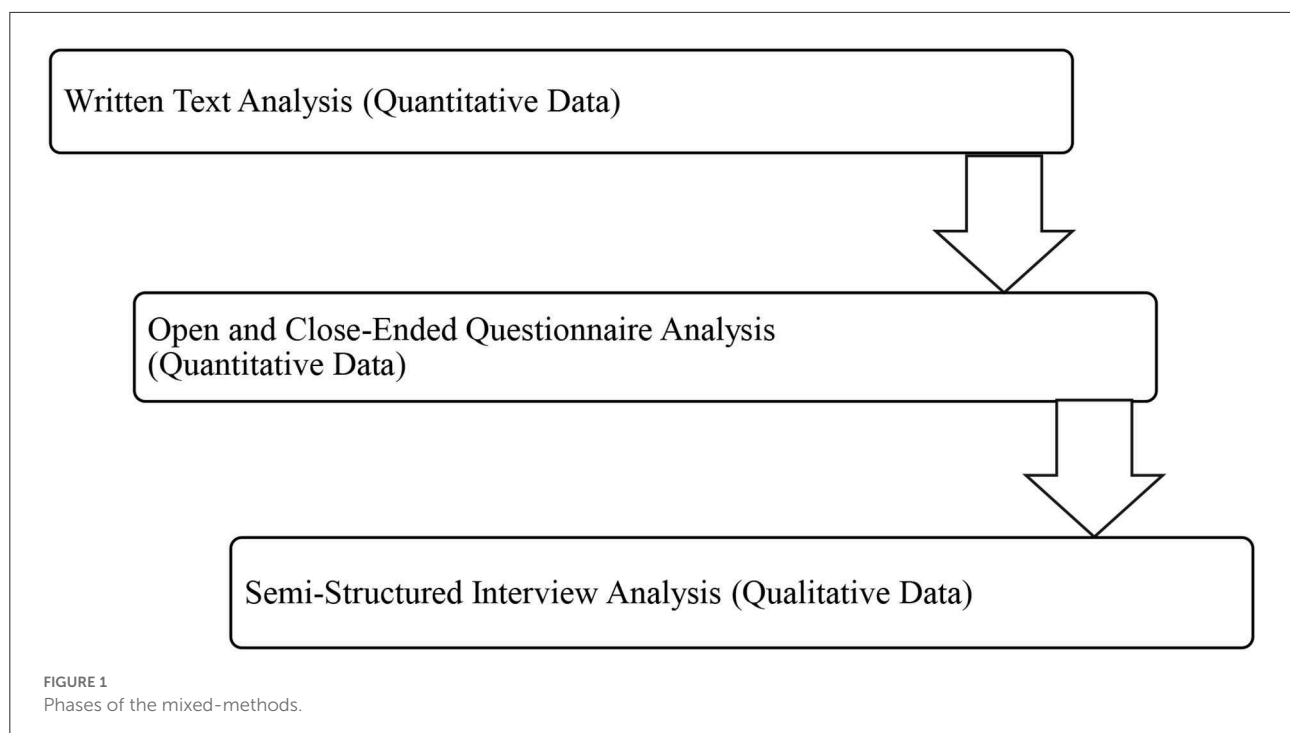
Data were obtained both quantitatively and qualitatively. The quantitative data were obtained from the written essays (including the two examinations: midterm and final) of the EFL participants and a questionnaire that was employed after the treatment phase, whereas the qualitative data were obtained from the interviews carried out after the treatment phase (see Figure 1). The written text analysis was used to examine, whether there was an effect of the different flipped learning models (FLMs), namely, in-class vs. out-of-class writing, on the writing performance of the EFL learners. To do these, the written texts of the participants were stored in different folders for each week as Task 1, Task 2, Task 3, Task 4, Task 5, Midterm exam, and Final exam, then these written texts were scored out of 10 for each week. Following these, at the end of the term, a researcher-made questionnaire that consisted of both open and close-ended questions was filled in by the participants. Through the implementation of the open-ended questions, more information regarding the unique thoughts of the participants about the in-class vs. out-of-class flipped learning models (FLMs) was obtained. Close-ended questions were asked to collect generalized data about the participant perceptions toward

the in-class vs. out-of-class writing in a flipped learning writing course (Jamshed, 2014). All the participants completed the questionnaire. Initially, the participants were asked about their background information such as age, gender, native language, country and years that they have been studying English by choosing the most convenient option. The questionnaire was applied through the use of Google Forms. In addition, to collect the qualitative data, the interview questions about the in-class vs. out-of-class flipped learning models (FLMs) for writing were asked to the participants during the online classroom hour through the use of the Google Meet online platform, and each group had a separate online meeting session for the interview process. The interview was applied to five EFL learners from group A and five EFL learners from group B in total, 10 of the participants volunteered to participate in the study. The semistructured interview included five open-ended questions in total, and the participants were asked about their beliefs and preferences regarding the implemented models through the use of a schematic presentation of questions. It took 10 min to interview each participant, in total it took almost 2 h to interview all the participants in both groups.

In brief, the following questions were asked as part of the interview:

- 1) What do you think about writing in-class and out-of-class in general? Is it essential or not? Is it beneficial or not to write in-class/out-of-class? Is it difficult or not? Why?
- 2) Do you use any resources while you write in-class/ out-of-class? If yes, what are these? Why do you prefer to use these sources?
- 3) Do you feel that you are improving your language proficiency in general (i.e., all skills, sub-skills and errors) or only in writing when you write in-class/ out-of-class? Why or why not?
- 4) If you had another chance to choose the environment that you will produce your written work from in-class or out-of-class, which one would you prefer? Why?
- 5) Is there anything that you want to add or share anything about writing in-class or out-of-class environment in the language learning process?

Data regarding the written texts were analyzed through the following steps. Initially, all the written texts were scored one by one, out of 10. Statistical Package of Social Sciences (SPSS) program version 20; descriptive statistics was employed to analyse the questionnaire data and essay scores. Henceforth, analysis of variance (ANOVA) test was used to crosscheck each group's participants' perceptions and preferences toward the in-class vs. out-of-class flipped learning models for writing. Furthermore, the key themes of each participant's interview transcript were separated to examine the reason behind the participants' positive and negative perceptions. Eventually, these key



themes and patterns were defined, grouped and coded by the investigator.

Validity and reliability

To ensure the reliability of the essay scores, the lecturer's and an ELT instructor's scores were set and compared employing a Pearson product-moment coefficient to find out the curvilinear relation among two variables. This has enabled the investigators to understand whether the existing correlation was condescending to the correct relation among these variables (Ravid, 2011). In the same way, the 2-tailed significance test was carried out to figure out if there was a positive or negative correlation among the variables and to see whether the relationship among these variables was statistically significant (see Table 1).

As it is shown in Table 1, values under 0.50 are used to indicate the poor reliability whereas values between 0.50 and 0.75 indicate satisfactory reliability. Similarly, good reliability is shown between 0.75 and 0.90, whereas values over the 0.90 are used to emphasize the highest reliability value. So that, as the results pinpointed in Table 1, Pearson correlation value was 0.91, which means that the value of reliability is at the top point and there is a positive correlation between the lecturers' and English instructors' scores. In particular, there was no significant variation between the two raters' scores for the tasks, where the in-class writing was used for the writing process. In fact, the

TABLE 1 In-class writing task 1.

		Researcher's marks	Lecturer's marks
Lecturer's mark	Pearson correlation	1	0.91**
	Sig. (2-tailed)		0.00
	N	14	14
Researcher's mark	Pearson correlation	0.91**	1
	Sig. (2-tailed)	0.00	
	N	14	14

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

TABLE 2 Reliability statistics.

CA	NI
0.80	77

CA, Cronbach's alpha; NI, Number of items.

scores that were provided by both the investigator and instructor were reliable.

Moreover, the questionnaire, which was employed for the examination of the EFL learners' preferences toward the in-class vs. out-of-class flipped learning models for writing, was adopted and adapted from Sengül's (2018) questionnaire. To understand the efficacy of the questionnaire, a pilot study was carried out.

TABLE 3 The most effective flipped classroom model for writing.

Tasks	N	In-class		Out-of-class	
		M	SD	M	SD
1	14	3.43	1.01	4.79	2.08
2	14	2.43	0.51	3.57	1.34
3	14	2.71	1.54	4.21	1.84
4	14	2.57	1.39	3.50	1.55
5	14	2.14	1.02	4.43	1.86
6	14	2.14	1.02	4.21	1.67
7	14	1.86	0.86	3.93	1.32
Valid N (listwise)	14				

M, Mean score; SD, Standard deviation.

The questionnaire was distributed to 30 EFL learners from the ELT department of a private university in Nicosia, during the 2019–2020 Fall semester. The findings of the pilot study were analyzed using Cronbach's alpha, to reveal the reliability of the questionnaire items (see Table 2). The findings revealed that the co-efficiency was 0.80, which refers to the fact that the questionnaire items were reliable (Virginia, 2015).

Ethical consideration

Before carrying out the study, ethical approval was received from the Ethics Committee of the Institute of Educational Sciences of Near East University. Following approval, both written consent and oral consent were received by the participants. In the same way, the participants were also informed that the data collected for this study will be kept confidential and not accessed by anyone else, except the researchers. Pseudonyms were employed to hide the real identities of the participants.

Findings and discussion

Written text

To find out whether there was an impact of the different flipped learning models, namely, in-class and out-of-class writing on the EFL learners' writing performances and which flipped model advances the EFL learners' writing skills the most during the flipped writing process, this study compared the two groups.

In-class writing

The participants in group A, where the EFL participants produced their essays in the online class environment, were

observed to have improved their writing skills after Task 1 (M: 3.43, SD: 1.01), as they had received better scores for Task 2 (M: 2.43, SD: 0.51). In Task 3 (M: 2.71, SD: 1.54), which was written as a midterm examination, their performance slightly decreased while they had improved their performance in Task 4 (M: 2.57, SD: 1.39). In the same way, they had improved their performance in Task 5 (M: 2.14, SD: 1.02), while their performance did not change in Task 6 (M: 2.14, SD: 1.02). Contrarily, the participants in group A increased their writing performance in Task 7 (M: 1.86, SD: 0.86), which was written as a final examination (see Table 3). These findings were similar to the findings of Saed and Ghazali (2017), who agreed that in-class writing had positive impacts on the EFL learners' writing skills. Apart from these, as the interview data presented the EFL participants in group A, namely, Janessa agreed that "In-class writing enables us to improve our four skills as we have a chance to collaborate with our classmates," and Jack stated that "As we have a chance to receive instant feedback from the teacher and learn new vocabulary items from the discussions with our friends, in-class writing helps us to advance our speaking, listening and reading skills, in addition to our writing skills." In other words, the reason behind the improvement of group A's writing skills might be directly linked with the EFL learner's positive perceptions toward the in-class writing process, as it provided them more collaborative, engaging and motivated environment with the instructor's presence and on time feedback.

Out-of-class writing

The participants in group B where the EFL participants produced their essays out of the class environment were observed to have improved their writing skills after Task 1 (M: 4.79, SD: 2.08), as they received better scores in Task 2 (M: 3.57, SD: 1.34). However, the participants in group B decreased their performance in Task 3 (M: 4.21, SD: 1.84), which was written as a midterm exam, while their writing performance rapidly increased in Task 4 (M: 3.50, SD: 1.55). In comparison with these, the participants' writing performance rapidly decreased in Task 5 (M: 4.43, SD: 1.86). Nevertheless, the EFL participants' performance in Task 6 (M: 4.21, SD: 1.67) significantly improved. In the same way, the participants in group B increased their writing performances in Task 7 (M: 3.93, SD: 1.32), which was written as a final exam (see Table 3). These findings were in line with the Bailey et al.'s (2020) research findings, who agreed that out-of-class writing had a positive impact on the learners' language skills. With respect to the interview data, Angelina from group B stated that "Out-of-class writing enables us to advance our reading and listening skills in addition to our writing skills as we have to search for further information and materials related with the topic," while Sue stated that "Out-of-class writing is not helpful at all, as during the in-class writing process the teacher's guidance enables us

to notice our mistakes immediately and we can produce better essays with less mistakes.” Remarkably, it is not incorrect to claim that the EFL learners’ writing performances in group B were influenced from the out-of-class writing process, as the participants need to search for further ideas and materials from the various sources without the instructors’ ontime guidance and feedback.

Although the participants in both group A and group B improved their writing performances, it can be observed that the participants in group A received better scores than the participants in group B. In fact, the EFL participants in group A who wrote their written texts as in-class performed better than those in group B, who wrote their essays out-of-class. Similar to the findings of [AbuSeileek and Qatawneh \(2013\)](#) and [Shang \(2017\)](#) who found that, both out-of-class and in-class models helped their EFL learners to advance their writing skills, it was proved that in-class writing had a more positive impact on the learners’ writing skills. To summarize, this study highlighted that in-class writing had more positive impact on the writing performances and achievements of the EFL learners in a flipped learning writing course, as it provided them more collaborative, engaging and motivated environment with the instructor’s presence and ontime feedback.

In-class vs. out-of-class FLM

Significantly, the participants were asked about their perceptions toward the in-class vs. out-of-class flipped learning models (FLMs) for writing, to reach more specific information. It was found that the participants in group A strongly agreed with the following statements: During the in-class writing process, we have more chance to get help from the teacher (M: 3.71, SD: 1.13), Writing out-of-class is time consuming (M: 3.64, SD: 1.49), I feel that I do not need to hurry up while I write out-of-class (M: 3.14, SD: 1.35), Getting into contact with our class mates for group work is much easier in the online environment (M: 3.07, SD: 1.26), and I feel more concentrated when I write in-class (M: 3.07, SD: 1.59). Moreover, they also agreed with the following statements: Both the pre-writing and writing process should be done in-class (M: 2.93, SD: 1.20), I prefer to write whenever I want (M: 2.93, SD: 1.26), I prefer to be taught in-class (M: 2.86, SD: 1.16), I can understand better what to do when the teacher guides me during the writing process (M: 2.79, SD: 1.31), I do not prefer to write out-of-class (M: 2.71, SD: 1.20), Teachers’ guidance is necessary for better writing (M: 2.71, SD: 1.20), I write better when I collaborate with my class mates in-class (M: 2.71, SD: 1.20), I prefer to be taught out-of-class (M: 2.64, SD: 1.21), I can write better when I write without any time limitation (M: 2.64, SD: 1.27), I prefer to get help from friends (M: 2.71, SD: 1.13), I feel more concentrated when I write out-of-class (M: 2.64, SD: 1.39), I learn better when I write in-class (M: 2.50, SD: 1.01), and Online

pre-writing exercises are more enjoyable (M: 2.50, SD: 1.01) (see [Appendix Table 1](#)).

On the other hand, the majority of the participants stated that they were neutral about the following statements: I feel that I need to hurry up while I write in-class (M: 2.43, SD: 1.34), I learn better when I write out-of-class (M: 2.36, SD: 1.39), In-class pre-writing exercises are more enjoyable (M: 2.36, SD: 1.33), I think it is more effective to write shortly after the pre-writing activities (M: 2.29, SD: 1.32), I write better when I collaborate with my class mates out-of-class (M: 2.21, SD: 1.12), I cannot concentrate on my writing at particular times of the day (M: 2.21, SD: 1.12), Both the pre-writing and writing process should be done out-of-class (M: 2.21, SD: 0.89), It is important to have an access to the online resources while writing (M: 2.21, SD: 0.97), Getting into contact with our class mates for group work is much easier in the classroom (M: 2.07, SD: 0.99), I prefer to get help from my lecturer (M: 2.07, SD: 1.20), and I prefer to use online sources when I do not understand something (M: 2.00, SD: 1.03). Contrarily, a great number of participants of the group A also disagreed with the following statements: I lose my concentration, when I write out-of-class (M: 1.93, SD: 0.91), During the out-of-class writing process we have more chance to get help from the teacher (M: 1.86, SD: 0.94), I lose my concentration, when I write in-class (M: 1.86, SD: 0.94), I do not prefer to write in-class (M: 1.64, SD: 0.84), and Writing in-class is time consuming (M: 1.64, SD: 0.84) (see [Appendix Table 1](#)).

As the results have indicated the majority of the EFL learner participants in group B strongly agreed with the following statements: I prefer to write whenever I want (M: 4.07, SD: 0.99), I can write better when I write without any time limitation (M: 3.86, SD: 0.94), Teachers’ guidance is necessary for better writing (M: 3.71, SD: 0.99), I do not prefer to write out-of-class (M: 3.50, SD: 1.09), During the out-of-class writing process we have more chance to get help from the teacher (M: 3.50, SD: 1.01), I write better when I collaborate with my class mates out-of-class (M: 3.43, SD: 1.08), Getting into contact with our class mates for group work is much easier in the online environment (M: 3.21, SD: 1.67), I write better when I collaborate with my class mates in-class (M: 3.14, SD: 1.09), I learn better when I write in-class (M: 3.14, SD: 0.66), I feel more concentrated when I write in-class (M: 3.07, SD: 1.20), and I feel that I do not need to hurry up while I write out-of-class (M: 3.00, SD: 1.56). Furthermore, they also agreed with the following statements: I prefer to get help from friends (M: 2.79, SD: 1.05), Both the pre-writing and writing process should be done in-class (M: 2.79, SD: 0.97), During the in-class writing process we have more chance to get help from the teacher (M: 2.79, SD: 1.12), I feel more concentrated when I write out-of-class (M: 2.71, SD: 0.99), Writing in-class is time consuming (M: 2.71, SD: 0.72), Online pre-writing exercises are more enjoyable (M: 2.64, SD: 0.92), I learn better when I write out-of-class (M: 2.57, SD: 1.15), and I prefer to be taught in-class (M: 2.57, SD: 0.75) (see [Appendix Table 1](#)).

Conversely, more than half of the participants in group B stated that they were neutral about the following statements: I think it is more effective to write shortly after the pre-writing activities (M: 2.21, SD: 0.89), In-class pre-writing exercises are more enjoyable (M: 2.14, SD: 1.23), I lose my concentration, when I write in-class (M: 2.14, SD: 1.02), Both the pre-writing and writing process should be done out-of-class (M: 2.14, SD: 1.02), I can understand better what to do when the teacher guides me during the writing process (M: 2.07, SD: 0.99), Getting into contact with our class mates for group work is much easier in the classroom (M: 2.07, SD: 1.20), I cannot concentrate on my writing at particular times of the day (M: 2.00, SD: 0.87), and I prefer to use online sources when I do not understand something (M: 2.00, SD: 0.67). Significantly, majority of the participants also disagreed with the following statements: I lose my concentration, when I write out-of-class (M: 1.86, SD: 1.02), I feel that I need to hurry up while I write in-class (M: 1.71, SD: 1.13), I do not prefer to write in-class (M: 1.71, SD: 0.72), I prefer to get help from my lecturer (M: 1.64, SD: 1.08), Writing out-of-class is time consuming (M: 1.64, SD: 1.15), I prefer to be taught out-of-class (M: 1.50, SD: 0.65), and It is important to have an access to the online resources while writing (M: 1.43, SD: 0.64) (see [Appendix Table 1](#)).

To summarize, the findings of the research pinpointed that the EFL learner participants in groups A and B had positive perceptions toward the in-class writing, while they had negative perceptions toward the out-of-class writing. As the findings of the interview emphasized the EFL participants in group A, namely, Tom put forth that “In-class writing has a positive effect on our learning process as we have a chance to both make a research, and ask about the misunderstood issues to the teacher at the same time, which will help us to produce better essays,” and Diana agreed that “In-class writing is the best writing option for us as we can learn from our friends’ mistakes and we have a more enjoyable and comfortable environment that we feel more motivated and concentrated to write.” Nevertheless, the participants in group B namely, Sue claimed that “In-class writing is better as it provides more supportive environment and through the collaborative activities we can brainstorm about the topic as a whole class besides of sitting alone and trying to find out new ideas to write about” and Michael stated that “As oppose to the out-of-class writing, in-class writing provides more supportive and creative environment that we can improve our speaking skills, while we are trying to reach further ideas about a particular subject to write about.” These findings were similar to the results of [Huang and Hsiao \(2012\)](#) and [Karaaslan et al. \(2018\)](#) who revealed that their learners had more positive perceptions toward in-class writing than out-of-class writing, as it provides more chances to increase the level of social interaction in the classroom environment. To put it simply, although the EFL learners believe that both in-class and out-of-class writing models have different positive and negative effects, they perceive in-class writing model to be more positively inclined during

the flipped classroom-based online writing course, as it enables them to advance the collaboration, concentration, motivation, creativity and writing improvement as well as their speaking skills through the guidance of the instructor.

Participant preferences

In order to find out a response to the primary research question regarding the EFL learners’ flipped learning model preferences among in-class and out-of-class writing models, in the first section of the questionnaire, the participant EFL learners were asked questions about their in-class and out-of-class writing model preferences during the flipped learning writing process. The findings of the study showed that majority of the EFL learners in group A, where the writing process occurred in-class, favored in-class writing (M: 1.71, SD: 0.91). This finding could be supported with the interview data, where the participants in group A, namely, Betty stated that “I prefer to write in-class as it enables us to have a discussion with our friends and ask questions to our teacher about the misunderstood issues.” and Diana, put forward the claim that, “It is better to write in-class as we know that teacher will be always there for us.” On the other hand, a great number of the EFL learner participants in group B, where the writing process occurred as out-of-class, put forward the desire that they would prefer to have their writing classes both in-class and out-of-class (M: 2.21, SD: 0.89) during the flipped classroom-based writing process (see [Table 4](#)). In the same way, the participants in group B, namely, Hera strongly agreed that she would prefer to write in-class as “In-class writing provides more friendly, enjoyable, comfortable, and relaxed environment that advances our motivation and concentration,” whereas one of the participants in group B, Angelina stated that “It would be better to write as both in-class and out-of-class, as both of them have different advantages and disadvantages.” Significantly, these findings were similar to the findings of [Oztok et al. \(2013\)](#), who put forward the claim that a majority of the EFL learners favored in-class writing rather than out-of-class writing, as it provided more chance for social interaction and communication. On the contrary, the findings of [Lowenthal and Dunlap \(2017\)](#) revealed that a majority of their EFL learners believed that both in-class and out-of-class writing models should be implemented in the lectures, as they have different advantages and impacts on the learning process. As a result, it is not incorrect to claim that although both in-class and out-of-class writing models might have different advantages and disadvantages, the EFL learners had strong preferences toward the in-class writing model during the flipped classroom-based online writing, as it enabled them to advance their writing and speaking skills. It also helped in their motivation toward the writing process through the collaborative environment where the EFL learners had obtained a chance to work together in a friendly, enjoyable, comfortable, creative, and

TABLE 4 English as a foreign language (EFL) learner's preference.

Flipped learning model statement	N	In-class writing		Out-of-class writing	
		M	SD	M	SD
If I had another chance to be taught writing, I prefer to write ...	14	1.71	0.91	2.21	0.89
Valid N (listwise)	14				

M, Mean score; SD, Standard deviation.

relaxed classroom atmosphere with the instructors' presence, on time guidance and feedback.

Conclusion

Overall, the research data regarding the initial research question which was purposed to analyse the most effective flipped classroom model for writing on the EFL learners' writing performances among the in-class and out-of-class writing models, the research data underlined that the most effective flipped classroom model for writing is the in-class writing model.

Following this, the results regarding the second question which purposed to analyse the EFL learners' perceptions toward the in-class and out-of-class writing models indicated that the majority of the EFL learners, who produced their written texts in-class, had positive perceptions toward the in-class writing model, while they had more negative perceptions toward the out-of-class writing model.

Lastly, as regards the EFL learners' preferences of a flipped learning model for writing among in-class vs. out-of-class writing models, the EFL learner participants, who produced their written texts in-class, favored in-class writing.

Consequently, it was highly suggested for pre-service and in-service instructors to implement the online in-class writing model into their flipped classroom-based writing courses, to create a more positive, collaborative and motivated environment. Through the implementation of online in-class writing models into the writing lessons, the instructors in university-level EFL learning would be better able to enable the EFL learners to improve their writing abilities and performances.

To conclude, this research has shed light on acquiring English as a foreign language writing skills to those instructors and researchers who would like to improve their EFL learners' writing abilities in a collaborative environment by implementing the necessary technology and also, by having a fruitful writing lesson in a technology-oriented environment. In fact, some recommendations were provided to help the researchers who would like to yield insights that would increase understanding in implementing more technology-oriented writing courses based on flipped classroom models. Significantly, this study is restricted to North Cyprus and if the context of the research

differs, the findings might change. In addition to these, the designed questionnaire did not provide any information on the efficacy of the various flipped classroom models on the EFL learners' different skills such as reading, speaking and listening. Next, as the research was employed in a restricted time period the findings might vary, if the duration of data collection of the writing process got extended or vice versa. The findings might also vary due to the class size, level of the EFL learners and the number of participants who took part in it.

Data availability statement

The original contributions presented in the study are included in the article/[Supplementary material](#), further inquiries can be directed to the corresponding author.

Ethics statement

The studies involving human participants were reviewed and approved by Ethical Committee Board of Near East University. The patients/participants provided their written informed consent to participate in this study.

Author contributions

FS wrote the article. HB contributed to the conceptualization and the data collection process. MK helped to the generation of the methodology and supervised the article. All authors contributed to the article and approved the submitted version.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Supplementary material

The Supplementary Material for this article can be found online at: <https://www.frontiersin.org/articles/10.3389/fpsyg.2022.1009800/full#supplementary-material>

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The raters' differences in Arabic writing rubrics through the Many-Facet Rasch measurement model

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Writing assessment relies closely on scoring the excellence of a subject's thoughts. This creates a faceted measurement structure regarding rubrics, tasks, and raters. Nevertheless, most studies did not consider the differences among raters systematically. This study examines the raters' differences in association with the reliability and validity of writing rubrics using the Many-Facet Rasch measurement model (MFRM) to model these differences. A set of standards for evaluating the quality of rating based on writing assessment was examined. Rating quality was tested within four writing domains from an analytic rubric using a scale of one to three. The writing domains explored were vocabulary, grammar, language, use, and organization; whereas the data were obtained from 15 Arabic essays gathered from religious secondary school students under the supervision of the Malaysia Ministry of Education. Five raters in the field of practice were selected to evaluate all the essays. As a result, (a) raters range considerably on the lenient-severity dimension, so rater variations ought to be modeled; (b) the combination of findings between raters avoids the doubt of scores, thereby reducing the measurement error which could lower the criterion validity with the external variable; and (c) MFRM adjustments effectively increased the correlations of the scores obtained from partial and full data. Predominant findings revealed that rating quality varies across analytic rubric domains. This also depicts that MFRM is an effective way to model rater differences and evaluate the validity and reliability of writing rubrics.

KEYWORDS

raters, analytic rubric, writing assessment, Many-Facet Rasch measurement model (MFRM), writing domains, Arabic essays validation

Introduction

Writing skills are complex processes and require the coordination of various high metacognitive skills. In order to produce written ideas, a writer must be able to organize and generate ideas, develop plans for ideas, review the writing, and monitor self-esteem in writing (Olinghouse and Leaird, 2009; Dunsmuir et al., 2015). Writing skills must be mastered in foreign language learning as stated explicitly in the curriculum document. Writing is the ability of a human to communicate in a set of letters that become understandable sentences. Through writing, students' thinking might be highlighted through the way it is organized, combined, developed, and strived to create an association of ideas to assist readers to understand their thinking organization. Based on writing performance in writing on gender, Adams and Simmons (2018) emphasized that there were significant gender differences in the writing performance of year 1 and year 2 among children from the North West of England, where boys produced shorter essays with fewer words spelled correctly, and were rated lower than girls. Findings also concluded that female students are more capable of producing quality writing than male students.

Writing skills are productive and expressive, and both are important as information conveyers. Writing skills are productive because writing is a productive activity of written work in the form of the expression of one's thoughts. Whereas expressive implies appropriate (able to) give (expression) images, intentions, ideas, and feelings (Mufidah et al., 2019). Writing skills are skills that are difficult for students to teach and master (Kurniawan et al., 2018) because it involves the most complex level of literacy and requires a high level of cognition. Mastery of writing skills can make a person more confident in speaking because aspects of vocabulary, grammar, and sentence structure have been mastered well.

The production of a piece of writing is the highest level in writing skills, which is the skill of producing an essay have harmony of words and meaning. The basic skills in writing are constantly developing and becoming more complex, especially when it comes to high-level writing skills that involve more complex knowledge about oral language skills, including knowledge of vocabulary and word retrieval as well as grammar and syntax. High-level writing also requires proficiency in the use of executive functions such as planning and working memory involved in the generation and transformation of ideas into words (Decker et al., 2016).

Refers to the context of writing skills in learning Arabic; it is a language skill that is emphasized a lot. This is in line with the content of textbooks that are more inclined to a written assessment format than listening, speaking, and reading (Mahmood and Zailaini, 2017). Students also need to be good at writing because most of the exam papers in Malaysia require answers in written form. Students who do not master

writing skills often have difficulty answering questions to convey information and answers accurately.

Conducting a study to assess the mastery of writing skills is a necessity. The aspect of vocabulary knowledge is one of the aspects of language that need to be paid attention to in writing skills in addition to aspects of grammar, organization of ideas, and language style. In fact, vocabulary is also an aspect of the language that needs to be mastered, as stated in the Arabic curriculum document. There are several issues regarding the assessment of Arabic language writing. The first issue is that Arabic language teachers usually only focus on teaching grammar to the point of marginalizing the importance of vocabulary mastery (Maskor et al., 2016). While foreign language learning at this point focuses more on the mastery and use of words in the target language as implemented in the Common European Framework of References for Languages (CEFR) as suggested by Alderson (2005).

In line with this requirement, this research aims to examine written assessment in Arabic using an expository essay, which provides valid, accurate, and fair ratings that are compatible with students' word acquisition in Form Four for religious schools in Malaysia. There are four aspects of language that are emphasized in the assessment of writing skills based on the rubric of the Malaysian Certificate of Education (SPM) Arabic Trial Exam in the State of Selangor, namely, (1) vocabulary, (2) grammar, (3) language style, and (4) aspects of text organization before formulated into the overall test score for students' writing skills.

Literature review

The designed writing assessments are a reflection of language learning purposes. The essay produced by a student is an indicator of the student's ability to master a foreign language communicatively (Bachman and Palmer, 1996). In line with the theory requirements, Bachman and Palmer (1996) suggested that the assessment is aimed at a real-life simulation that includes individual performance and performance appraisal by raters. Although McNamara (1996) argued that the communicative theory is still relevant in testing language ability; hence, different aspects need to be considered before setting the level of writing abilities and scoring processes at school levels.

Examining the facts in-depth, Phelps-Gunn and Phelps-Terasaki (1982) and Khuwaileh and Shoumali (2000) identified three aspects of students' weaknesses in writing: (a) a description that indicates the sentences are not elaborative, non-specific, and characterized by simple word usage, slang usage, and incomplete ideas; (b) writing styles that are less clear, not focused on topics, less integrated, less logical, less emphasis, and less consistent with writing goals; and (c) error in the punctuation, grammar, mechanical, spelling, and capitalization. Based on

this weakness analysis, a scoring scheme for writing skills is triggered.

In line with [Bachman and Palmer \(1996\)](#), the evaluation process is a strategic competency that includes the description of the assigned tasks and the scoring rubric. Scoring rubrics are methods of controlling the reliability and validity of student writing results. Several researchers noted the evaluation of educators is more accurate when using the rubric ([Jonsson and Svingby, 2007](#); [Rezaei and Lovorn, 2010](#)). Meanwhile, the adverse impact of using rubrics, such as the low reliability has yet to be elucidated in several studies. Consequently, many educators employed rubrics with the premise that they improve grading objectivity, especially regarding the written submissions of learners. Several empirical studies have raised serious doubts about the validity of rubric-based performance assessments, such as [Sims et al. \(2020\)](#) and [Mohd Noh and Mohd Matore \(2022\)](#).

[Weigle \(2011\)](#) categorizes three types of writing rubrics, namely, analytical, holistic, and primary trait. Primary trait rubrics are mostly used to determine learners' necessary writing abilities concerning particular writing tasks. Holistic rubrics are used to evaluate the characteristics of learners' written works by utilizing an in-line score with the determined characteristics and superficially described distinct performance levels such as grammar, spelling, and punctuation mistakes ([Gunning, 1998](#); [Weigle, 2013](#)).

Holistic scoring is difficult for second-language learners as distinct elements of writing skills evolve differently for various writers. [Wiseman \(2012\)](#) concluded that some students might express strong content and organization but are limited in grammatical precision, while others can exercise excellent sentence language control but are unable to organize their writing. Some students may not perform similarly, for every component of written ability, necessitating more quality assessment methods such as lexical, syntactic, speech, and rhetorical characteristics.

A study conducted by [Knoch \(2011\)](#) comparing holistic rubrics with analytics revealed that the rater reliability was significantly higher and raters could better differentiate between various aspects of writing when more detailed analytical scale descriptors were used. Hence, analytic rubrics are more comprehensive evaluation guides used to clarify the level of expertise in distinct areas of written tasks ([Vaezi and Rezaei, 2018](#)). In addition, [Winke and Lim \(2015\)](#) clarified that raters attended all the scoring categories described in the rubric, while concentrating on what they felt was essential with the holistic rubric.

Earlier studies have shown that raters have a significant effect on written assessment results. Researchers recognize the mediating importance of rater judgment in student writing ([Eckes, 2008](#); [Engelhard, 2013](#); [Zhang, 2016](#)). In other words, many researchers are interested in the degree to which rating errors and systemic biases introduce irrelevant structural

variation in the interpretation of ratings. Concerning rater impacts, features like rubrics can also lead to psychometric constraints in rater-mediated writing assessments ([Hodges et al., 2019](#)).

The present study emphasizes that raters have several variables to address when rating and participating in tasks that require an assessment from various information sources. However, in contrast to the studies conducted in the Arabic language, written assessment receives less attention and emphasis on empirical validation and reliability. Therefore, it is essential to monitor rater quality in terms of their usage of rating scales and contribution to test the validity and reliability. The current study focuses on the examinees (essays), raters, writing domain (rubric), and rating scale for 15 Arabic essays. Thus, the analytical method was selected in order to control the consistency of raters' ratings based on the designated scoring criteria.

This research aims to examine written assessment in Arabic using an expository essay, which provides valid, accurate, and fair ratings. Concurrently, this study provides information on the characteristics of effective writing. We used a scoring rubric from previous examinations that inform raters about high-quality writing throughout the scoring process. These rubrics also minimize discrepancies between raters given the distinct instrument interpretations. The following sections present the sample, rating processes, and data analysis procedures that demonstrate the validity, reliability, and fairness of the data scores. Specifically, the following research questions are to be answered in this study:

- a. To what extent do the interpretation and use of writing domains in the rubric demonstrate validity?
- b. To what extent do the interpretation and use of writing domains in the rubric demonstrate reliability?
- c. To what extent do interpretation and use of writing domain in the rubric demonstrate fairness?

Materials and methods

This study uses an analytic scoring rubric adopted from previous state examinations for the Malaysian Certificate of Education Trial Examination for Arabic. The main reasons of doing this research topic is because it has highly needs to examine written assessment in Arabic which will provides valid, accurate, and fair ratings. Previously, not much was discussed regarding empirical evidence about the accuracy of assessors in giving accurate assessments related to Arabic writing. Formerly, evaluation was limited to the use of analysis such as Cohen Kappa, which is more limited to raters. The main instrument/examinee in this study are 15 essay selections based on the writing performances of the respondents. The essay was produced by Form Four students from a religious

secondary school, which is under the supervision of the Ministry of Education. However, the topic of the proposed essay is one of the themes in the Arabic language syllabus, which is written in the textbooks. Therefore, it is not a peculiar matter for respondents to write an essay according to the selected title. The essay selection was based on a researcher's brief assessment of the essay quality ranging from good to moderate and weak. The essay was collected and printed in one booklet. Rubric scoring guides and rating scales were provided for each essay. The layout print was used to enable the raters to review the essays.

Five proposal titles were chosen for expository essays to gain experts' agreement. First, the procedure for determining the content validity of the writing task involves five experts in the selection of appropriate essay titles and scoring rubric items. At this phase, the content validity index (CVI) was applied to determine the expert agreement scores. The CVI covers the validity of the item (I-CVI) and that of the entire instrument (S-CVI) (Lynn, 1986). Each expert evaluates the level of item suitability based on four-level scales, where 1 = very inappropriate, 2 = inappropriate, 3 = suitable, and 4 = very suitable. In the first round, each expert is given at least 2 weeks to confirm the items proposed by the researcher and is asked to suggest improvements to the item if any. After 2 weeks, the researcher re-contacted the expert for the confirmation of the proposed item. The second round was conducted after the researcher made an improvement or correction based on the proposals received from the experts.

The value of I-CVI was used to determine the reliability between the experts in line with the average level of suitability of each item based on the assessment of all appointed experts. The accepted I-CVI value is 1.00 based on the value of the five expert's agreement. Meanwhile, the S-CVI value of the essay is 0.91. Polit and Beck (2006) suggested that an S-CVI value of >0.80 is an indication of the overall acceptable quality of the item. The higher the value of S-CVI, the higher the quality of the item and the choice of the expert in meeting the criteria of the instrument. These five experts also served as the raters for examining the internal consistency of rubrics for essays that were evaluated using the MFRM.

Students were informed that the essay was to assess students' knowledge of vocabulary and their ability to construct context-related sentences. Students were asked to write no fewer than 40 words based on their creativity within 30 min. The five raters were then given the five essays to evaluate. Five raters gave each essay a score, and the amount of connectivity needed for a Rasch analysis was found. The five raters were asked to rate the essays using the Malaysian Certificate of Education Trial Examination for the Arabic rating scale (analytical rating). The rubric is analytical, which comprises domains of writing known as vocabulary, grammar, language use, and Organization as agreed by experts. Every domain contains three scales: excellent (score 3), moderate (score 2), and weak (score 1). The reasons

for choosing the analytical rubric are because it can explicitly segregate an assignment into its constitutive skills and provides the assessor with guidelines for what each performance level looks like for each skill.

The selected scoring rubric is from a previous state examination for the Malaysian Certificate of Education Trial Examination for Arabic. This examination was implemented in one of the states in Malaysia in 2015. The use of a scoring rubric is based on assumptions that the scoring format is similar to the summative test, which is commonly used for school-based assessment. Although the scoring rubric has been used widely, its validity and reliability have to be tested according to the scope of this study. In contrast, the respondents of this study are also exposed to such essays in the classroom.

The essay selection is the result of the respondents' writing performances. They were 15 essays of Form Four students from a religious secondary school, which is under the supervision of the Ministry of Education. However, the topic of the proposed essay is one of the themes in the Arabic language syllabus, which is written in the textbooks. Therefore, it is not a peculiar matter for respondents to write an essay according to the selected title. The essay selection was based on a researcher's brief assessment of the essay quality ranging from good to moderate and weak. The essay was collected and printed in one booklet. Rubric scoring guides and rating scales were provided for each essay. The layout print was used to enable the raters to review the essays.

Meanwhile, the selection of raters was based on their experience in Arabic language education. Two teachers are expert teachers in Arabic who have been teaching for more than 10 years in secondary schools. In contrast, two more raters are experienced teachers who have been teaching Arabic for over 20 years in a religious secondary school that is under the supervision of the Ministry of Education. Another teacher is a novice teacher who has 5 years of teaching experience in Arabic in a secondary school. They were chosen because of the research to evaluate the rubrics used as well as validate them using the Malaysian Certificate of Education Trial Examination for Arabic rating scale. Table 1 summarizes the criterion of each rater.

This study employed the Many-Facet Rasch measurement model (MFRM) model to explain how the rater interpreted the scores of the writing tasks. For this research context, the Rasch model is extended by MFRM to situations in which more than two facets interact to produce an observation in Arabic writing. It enables the development of a frame of reference in which quantitative comparisons are no longer dependent on which examinee was rated by which judge on which item. In order to support the research in the Arabic language, this analysis seeks to evaluate the rubrics used as well as validate them. Raters mediate the scores of the essays. In other words, self-rating does not represent the writing quality of the test directly as the rater's judgment plays a crucial role (Engelhard and Wind, 2017;

Jones and Bergin, 2019). Hence, research is needed to review scores on quality writing and the consequences of scoring tasks.

A previous study used MFRM to investigate the variations in rater's severity and consistency before and after practice and found that rater training contributed to increasing the accuracy of the scorer's intra-rater reliability (internal consistency) (Weigle, 1998). Lim (2011) also conducted a longitudinal study for 12–21 months among novice and skilled raters to examine rater harshness/leniency, accuracy/inactiveness, and centrality/extremism. The study of the different impacts of the written rater can lead to better scores and rater training. It can also provide validation data on rating scales of writing assessment (Shaw and Weir, 2007; Knoch, 2011; Behizadeh and Engelhard, 2014; Hodges et al., 2019).

The findings could portray in-depth that the MFRM can monitor rater's performances and considers the potential effects of facets on the resulting scores. Facets such as raters, rating scales, and examinations are arranged within the standard interval scale with rater scores (Goodwin, 2016; Eckes, 2019). Two assumptions were made to draw meaningful information from MFRM measures: The data must fit in with the model, and the test must measure a single unidimensional construct.

The raw data were keyed-in using Microsoft Excel and analyzed using the MFRM by the FACETS 3.71.4. A program named FACETS 3.71.4 was used to analyze the data in MFRM. This study represents the relationship between facets assessment and the probability in which specific results will be observed within more than one-faceted circumstances. In addition, this research is an expansion of the Rasch measurement theory (Engelhard and Wind, 2013), in which raw scores are transformed into log odds. This interval scale implies that an equivalent range between any two information points is equivalent to the capacity of individuals or items (Bond and Fox, 2015). The FACETS program can produce the interval scale as a variable map or Wright map for direct comparisons of the test-taker writing proficiency, raters' severity, scale difficulty, or other facets of interest (Eckes, 2019). Briefly, there were three facets in this research: raters, examinee (expository essays), and

scoring rubric or item (analytical rating elements: vocabulary, grammar, language use, and organization).

This variation in the MFRM enables a classification scale framework to differ by item in this situation. The MFRM can demonstrate discrepancies among raters in the use of scoring classifications (Engelhard and Wind, 2013). The Many-Facet Rasch measurement model used in this analysis can be expressed as:

$$P_{nikj} = \frac{e^{(\beta_n - \delta_i - F_k - C_j)}}{1 + e^{(\beta_n - \delta_i - F_k - C_j)}} \quad (1)$$

where β_n represents individual ability, δ_i represents the level of scales difficulty, F_k represents the level of threshold difficulty, and C_j represents the level of rater's efficiency.

Results and discussion

Table 2 shows the essay, rating scale, and raters' reliability index based on the MFRM approaches using Facet 3.71.4 software. The findings indicate that the mean logit of the essay is at 0.00 logit with a standard deviation (SD) of 1.29. This finding reflects broad dispersion throughout the logit scale. This widespread ability level denotes the presence of various levels of essay quality. The rating scale at SD = 0.32 illustrates that the dispersions are not so vast on the logit scale, and this finding is equivalent to the raters at SD = 0.46. However, the average MNSQ outfit for the essay is 0.97, as the rating scale (0.97) and the raters (0.98) are approaching the expected value of 1.00. Therefore, based on the SD values for the essay, the rating scale and raters establish that the instrument aligns with the model. The chi-square values for raters (15.5) and essays (105.1) are significant Engelhard (2013), whereas the rating scale does not reveal a significant value. Further analysis needs to be conducted to ensure the rating scale is reliable.

The reliability of the essay is 0.88, while the separation index is 3.88, thus indicating good reliability (Fisher, 2007). Whereas the reliability of the raters is 0.68, and the separation index is 2.27, thereby corresponding to moderate reliability and acceptable separation (Linacre, 2006; Fisher, 2007). The rating scale (0.47) demonstrates poor reliability (Fisher, 2007), but the separation index (1.59), which equals two separation indices, denotes a good item separation (Linacre, 2006). Although statistical findings revealed a non-homogeneous rubric with low-reliability values and non-significant chi-square, the separation index illustrates that the raters understood the rubric base rating scale.

Raters displayed reasonable agreement based on the value of the inter-rater reliability of 52.9%, which was not different from the 55.0% despite the moderate reliability. These findings may elaborate that the raters had the same opinion in scaling the essay rating and vice versa (Linacre, 2004). Overall, the reliability value for essays, rating scales, and raters is reasonable and acceptable. Validation analysis in MFRM includes fit

TABLE 1 Summary of rater criteria.

Rater code	Workplace	Subject	Working experience
A	Secondary school	Arabic Language Upper Form	18 years
B	Secondary school	Arabic Language Lower Form	15 years
C	Religious secondary school	Arabic Language Lower Form	22 years
D	Religious secondary school	Arabic Language Upper Form	25 years
E	Secondary school	Arabic Language Lower Form	4 years

TABLE 2 Summary statistics of essays, rating scale, and raters' reliability.

	Essays	Writing domains (Rubric base rating scale)	Raters
N	15	4	5
Measures			
Mean	0.00	0.00	0.01
Standard deviation (SD)	1.29	0.32	0.46
Standard error (SE)	0.45	0.23	0.26
Outfit mean-square			
Mean	0.97	0.97	0.98
Standard deviation (SD)	0.31	0.17	0.18
Homogeneity index (x2)	105.1*	7.6	15.5*
Degree of freedom (Df)	(15–1) = 14	(4–1) = 3	(5–1) = 4
Strata	3.88	1.59	2.27
Reliability	0.88	0.47	0.68
Inter-rater reliability			
Observed exact agreements			52.9%
Expected %			55.0%

* $p < 0.01$.**TABLE 3** Analysis of fit statistic for essay.

Essay number	Measure	Model S.E	Outfit		PTMEA CORR
			MNSQ	Z-std.	
1	0.41	0.45	0.61	–1.1	0.46
2	0.41	0.45	1.19	0.6	0.13
3	1.57	0.44	1.19	0.8	0.78
4	1.57	0.44	1.08	0.4	0.44
5	–0.19	0.45	1.16	0.5	0.52
6	–1.55	0.44	0.72	–1.2	0.48
7	–0.79	0.44	0.84	–0.4	–0.27
8	0.80	0.44	0.76	–0.7	–0.09
9	–0.59	0.45	0.87	–0.2	0.22
10	–0.39	0.45	1.18	0.6	0.16
11	–0.39	0.45	1.69	1.7	–0.02
12	1.76	0.44	1.20	0.9	0.30
13	0.01	0.45	0.40	–2.0	0.22
14	–0.80	0.44	1.00	0.1	0.13
15	–3.40	0.56	0.74	–0.5	0.43

statistics and scale calibration analysis. Fit statistics is one of the validation indicators by observing the mean square, Z-standard (Z-std), and point-measure correlation values. **Table 3** shows essay number 11 to be out of range in terms of mean square (0.5–1.5) (Linacre, 2005; Boone et al., 2014), thereby exhibiting an adverse polarity. Whereas essay numbers 7, 8, and 11 demonstrate negative polarities, which denote that the content does not fit the topic. Essay numbers 2, 9, 10, 13, and 14 are less

TABLE 4 Analysis of fit statistic for rubric base rating scale.

Writing domain (Rating scale)	Measure	Model S.E	Outfit		PTMEA CORR
			MNSQ	Z-std.	
Vocabulary	–0.41	0.23	1.09	0.5	0.71
Grammar	0.39	0.23	0.86	–0.7	0.53
Language use	0.23	0.23	1.18	1.0	0.50
Organization	–0.20	0.23	0.76	–1.4	0.51

TABLE 5 Analysis of fit statistics for raters.

Rater	Measure	Model S.E	Outfit		PTMEA CORR
			MNSQ	Z-std.	
Rater A	0.01	0.26	0.92	–0.3	0.55
Rater B	0.62	0.26	0.74	–1.3	0.48
Rater C	0.24	0.27	1.07	0.4	0.67
Rater D	–0.06	0.25	0.97	–0.1	0.57
Rater E	–0.78	0.26	1.18	1.0	0.56

than 0.30 point-measure correlation values, indicating that the essays are unable to highlight the respondents' abilities (Linacre, 1999; Bond and Fox, 2015). Essay number 15 is considered the weakest at logit (–3.40), disclosing many errors but still on the topic. Meanwhile, essay number 12 is the best essay as it occupies the highest logit position (1.76). This finding indicates that some participants are unable to effectively compose essays even if the topic of selection is a prevalent subject in the formative and summative tests.

Table 4 shows the appropriate rubric base rating scale statistics in the MNSQ range from 0.50 to 1.50 (Linacre, 2005; Boone et al., 2014). The Z-std value was also within the range of +2.0 (Linacre, 2005; Bond and Fox, 2015) and PTMEAs, which represents a value greater than 0.30 (Bond and Fox, 2015). These values indicate the item measures a single construct (Bond and Fox, 2015). Of the four proposed domains, the vocabulary element is readily understood by the logit raters (–0.41), whereas the grammatical elements are the most challenging (0.39). However, the standard error is an excellent range, which is stated by a value of <0.25 (Fisher, 2007). Overall, the rating scale disclosed that all rating scale elements are fit and suitable for the evaluation and measurement of the essays to be performed. All raters also deeply comprehend the rating scale.

Table 5 shows the statistical coefficients of five raters from codes A, B, C, D, and E, ranging from 0.50 to 1.50 (Linacre, 2005; Boone et al., 2014). The Z-std values are also within the range of +2.0 (Linacre, 2005; Bond and Fox, 2015). The overall value of PTMEA is 0.30, indicating that the raters can distinguish between each rubric used in the rating scale (Bond and Fox, 2015). Concerning the logit, rater B (logit 0.62) is the most

TABLE 6 Rating scale calibration.

Score	Data		Quality control			Rasch andrich thresholds		Expectation
	Category total	Counts used	Average measure	Expected measure	Outfit MNSQ	Measure	S.E	Measure category
1	54	54	−1.36	−1.51	1.1			(−2.96)
2	191	191	0.01	0.10	0.90	−1.88	0.18	0.00
3	55	55	1.30	1.12	0.90	1.88	0.17	(2.97)

stringent rater, while rater E (logit -0.78) is the most-lenient rater. The standard error value is quite good, within the range of <0.50 (Fisher, 2007). This value indicates that the rater evaluates the essay carefully. The results also reveal that they can use the rubric precisely based on their knowledge.

Rating scale functioning

This calibration was analyzed using a rubric-based rating scale, where scale 3 = distinction, scale 2 = medium, and scale 1 = weak. In general, the variation in each rubric scale is in the appropriate range of 1.4–5.00 (Linacre, 1999, 2004), as shown in Table 6.

Figure 1 also portrays a non-threshold scale of scale 1 with scale 2 at -1.88 and scale 3 at 1.88 . This finding depicts that the scale curve is apparent and separated from each other (Figure 1). Figure 1 also defines that, in the assessment of the essay, each rater understands the function of each rubric. The scale ranking results in this study can be used for further research.

Variable map (Wright map)

On average, the examinee (essays) locations were close to logit scales at the rater scale and rubric base rating scale (all-around zero logits). This measure suggests acceptable targeting between the three facets. Figure 1 provides additional information about the logit scale. Specifically, Figure 1 is a variable map that graphically displays the test-takers, raters, and the category of rating thresholds.

The first column indicates the estimated location of the logit scale of the test-takers (essay), raters, and item (rating scale). Higher numbers denote higher judged writing performance, more severe raters, and more difficult rating scale categories. The second column depicts the locations for essays. The examination of the essay locations reveals a wide range of locations between -3.40 and 1.76 logits for the lowest (mean rating = 1.18) and highest judged writing performances (mean rating = 2.45), respectively. The third column shows the locations for the item or writing domain for the rubric. The

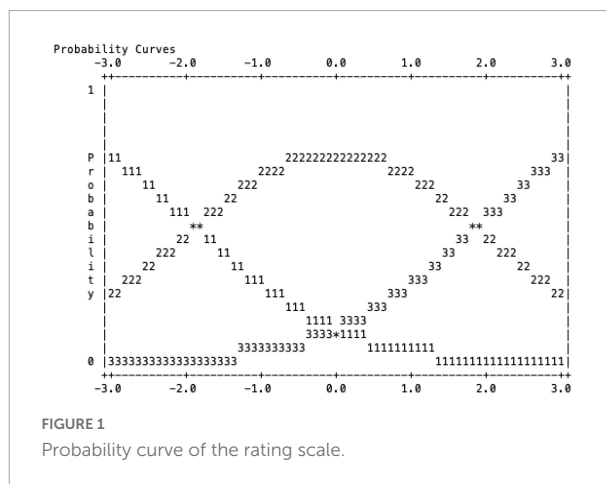
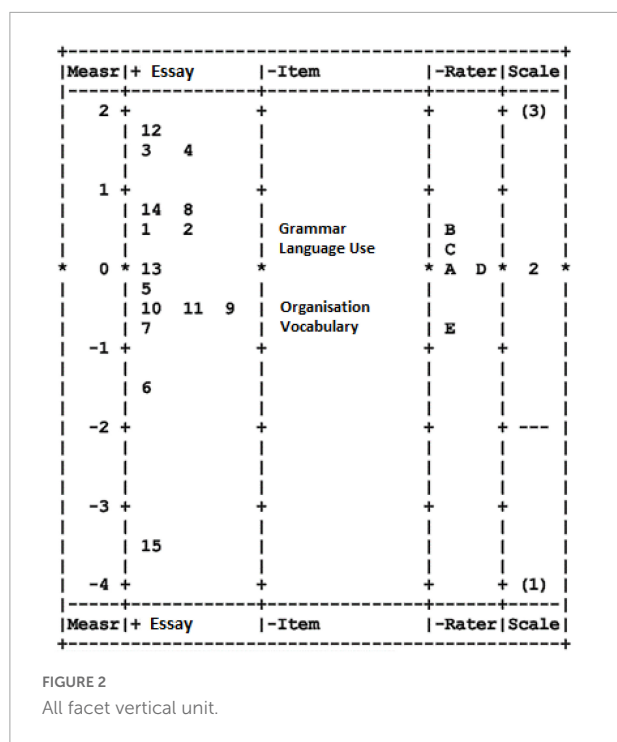


FIGURE 1
Probability curve of the rating scale.

examination of these estimations reveals a range of item difficulties, between -0.41 logits for the item that was judged as easiest (item vocabulary; mean rating = 2.11) and 0.39 logits for the item that was judged as the most difficult (item grammar; mean rating = 1.91). The fourth column depicts the locations of the individual raters. The location estimates reflect differences in rater severity, ranging from -0.78 logits for the most-lenient rater (rater E; mean rating = 2.13) to 0.01 logits for the most severe rater (rater A; mean rating = 2.00). The final fifth column in the variable map illustrates the categories of the calibration of the rating scale ranging from scale 1 to 3.

The accuracy of the location estimation was assessed using SEs and separation statistics. Table 2 shows a small range of SEs for essays (0.45), raters (0.26), and rating scales (0.23) regarding the distribution of the logit scale. In particular, the average SE for the essay facet was relatively higher for the rater and the rubric base rating scale than the average SEs. This result is expected given the higher number of observations among each rater and every item in the rating scale compared with each student.

Figure 2 shows the descriptive mapping for each facet evaluated in this study. The first column is an essay using the value of “logit” (1.76 to -3.40), which describes the comparative quality of the essays (column Essay) tested. Essay number 12 is the most outstanding (1.76), while essay number 15 is the weakest because it is at logit (-3.40). Essays numbers 3, 4, 8, 12, and 14 are excellent category essays that conform to the writing



scoring criteria. Essay number 13 fails in the aspects of grammar and language use. Essay number 5 only passes the vocabulary aspect, while essays numbers 7, 6, and 15 fail in all aspects of the rubric. Essay numbers 10, 11, and 9 fail to address all elements of grammar, language use, and organization but are likely to fail or pass in vocabulary.

The five raters who assessed the essay can be classified into three categories: stringent, moderate, and lenient. This measure can be seen in the fourth column (column Rater) in the range of -1 to $+1$. Rater E is considered the most lenient in scoring, while raters A and D are modest in scoring. Meanwhile, raters B and C are stringent raters in this essay scoring, and both of them taught Arabic in a lower form. Rater E is a novice teacher who only has 4 years of experience in teaching Arabic at a lower form in a secondary school. Rater B is an Arabic teacher who has taught Arabic for 15 years for lower form, and also rater C who taught Arabic for 22 years at a religious secondary school.

Rater E is a novice teacher who has taught the Arabic language for 4 years in a lower form at secondary schools. Meanwhile, raters A and B have been teaching Arabic at secondary schools for more than 10 years for upper and lower forms. In addition, rater C taught Arabic in the lower form, while rater D taught the upper form for more than 20 years at religious secondary schools. The diversity of the rater's backgrounds reflects their performance in assessing the essay. The Arabic teachers who taught upper forms are considered a better scoring performance than those who taught lower forms. The performance displayed by raters A and D is likely to result from their experience in teaching senior high-school students.

Notably, the type of school does not influence the rater's performance. Conclusively, the variable map (see Figure 2) depicts that the rubric used for the rating scale can differentiate the quality of the essay produced by the respondent.

Limitations and future research

Additional proof is required in various contexts to determine the psychometric features of the rubrics in writing. Specifically, a future study could investigate whether the new rubrics may be added to determine the efficacy and efficiency of each rubric rating in terms of reliability, validity, and fairness. The raters in this study demonstrated different seriousness levels when using the rubrics to evaluate the students' outcomes. Statistically, the Rasch model alleviates rater severity in the calculation of test-takers' results (Wright and Linacre, 1989). However, further research should provide significant reasons why raters use these rubrics for writing assessments to the extent of differences in seriousness. For instance, researchers could perform interviews with raters concerning their judgment procedures to understand how raters interpret and apply the rubric to student compositions. A future study among the population is required to determine whether the rubrics are fair among groups and individuals from different types of schools. Nevertheless, validity and reliability could be enhanced by involving more raters and essays in future studies.

Conclusion

The findings from this study demonstrate strong validity, reliability, and fairness of scores. Overall, the Many-Facet Rasch measurement model (MFRM), which is rarely used in Arabic studies, reflected that the rubric for rating scores has good reliability and validity and can be used in actual studies. All raters can effectively differentiate the functions of each rubric and rating scale. The use of rubrics in scoring can detect the strengths and weaknesses of students in writing skills (such as language use, organization, grammar, and vocabulary use). The feedback from scoring could assist teachers in developing ideas regarding teaching strategies based on students' weaknesses. The choice of the analytical method is more accurate than the holistic method in order to assess the writing performance. Moreover, an analytical method could be provided through the information on the mastery stage of each writing domain.

Data availability statement

The original contributions presented in this study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

Ethics statement

The studies involving human participants were reviewed and approved by Ministry of Education Malaysia, Putrajaya. The ethics committee waived the requirement of written informed consent for participation.

Author contributions

HB was involved in data collection. ZM wrote the first draft of the manuscript. All authors were responsible for the conception, design of the study, performed statistical analysis, contributed to the interpretation of findings, made critical revisions, and have read and agreed to the published version of the manuscript.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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A metaphor analysis of EFL graduate students' beliefs about an EAP textbook

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This study aimed to evaluate an English for Academic Purposes (EAP) textbook by examining English as a Foreign Language (EFL) graduate students' beliefs about the textbook through metaphor analysis in a Chinese University setting. This is mainly a descriptive research in nature, and a qualitative research method was employed, supplemented by a quantitative method. The participants of the study are a total of 147 first-year EFL graduate students from a public university in the city of Beijing, China. This evaluation revealed that the EAP textbook provided joy, security, grit, and curiosity for these students, and at the same time, it was reported as old-fashioned, exam-oriented and teacher-directed. It would be more appropriate with some modifications and also with some additional materials to meet the needs of the EFL graduate students, and some possible implications for teachers and researchers were also suggested in the study.

KEYWORDS

metaphor analysis, textbook evaluation, students' beliefs, EFL context, EAP

1. Introduction

Textbooks influence academic growth and success of students at all levels of education (Azizifar et al., 2010). Most specifically in the field of language learning, textbooks become paramount as they play a major role in providing learning input, guidance and insistence for language learning. As for graduate students, in academic settings they need to acquire the ability to read papers in English and communicate in English with experts in the international community. But, the quality and efficacy of textbooks could be challenges in connection with their relevance to the curriculum standards and learning outcomes of students, and at times, students fail to get much assistance from textbooks because of certain reasons that consequently hinder students' progress and performance in learning English as a foreign language (Lee and Wong, 2000). In a context where these learners have little or no access to English outside classrooms, English for Academic Purposes (EAP) textbooks play a significant role in giving learning input and providing help and persistence for the academic language learning. Scholars have identified problems of EAP textbooks in a Chinese university setting (e.g., Cai, 2011; Ding and Jiang, 2015). Evaluation of EAP textbooks could give further insights into the future revision and/or designing of the textbooks for learners of academic English (Sajjadi, 2011). Many previous studies (e.g.,

Jamshidi and Soori, 2013; Mohammadi and Abdi, 2014; Harbi, 2017; Lodhi et al., 2019) examined efficiency and appropriateness of textbooks by using scales or checklist for evaluating textbooks. Some study (e.g., Jou, 2017) reported English language learners' reactions to a graduate-level academic writing textbook through interviews. Could checklists of interviews fully reflect underlying or subconscious beliefs of learners? The limitation of many scales or checklists is "the use of somewhat arbitrary and restricted timeframes instruction" (Boyle et al., 2015, p.190). Metaphors could provide more flexibility, adaptation, or imagination. However, few studies have done evaluations of EAP textbooks through metaphor analysis from students' perspective in an EFL setting.

2. Metaphors and metaphor analysis

Metaphor, as a perception tool, provides us with ways for meaning transfer to discover and accounts for how people think about events, facts, and concepts through analogies (Saban et al., 2007; Zheng and Song, 2010; Han, 2011). According to McGrath (2006a) metaphoric language is particularly revealing of the subconscious beliefs and attitudes that underlie consciously held opinions. Lu and Liu (2013) stated that researchers could regard metaphor as a kind of discourse based on sentences and paragraphs beyond vocabulary, and metaphor analysis was regarded as a branch of discourse analysis and a research method. De Guerrero and Villamil (2002) defined metaphor analysis as "a method that systematically examines elicited or spontaneous metaphors in discourse as a means for uncovering underlying conceptualizations" (p.96). According to their conclusions, the process of applying metaphor analysis in a study was summarized: collecting metaphors about the topic, generalizing those metaphors, and using the results to show the implied meanings behind the metaphors. Studies applying metaphor analysis have explored EFL learners' beliefs about English learning (e.g., Shi and Liu, 2012; Lu and Liu, 2013), EFL Learners' beliefs about speaking English and being good speakers (Dincer, 2017), students' perceptions about English writing (Erdogan and Erdogan, 2013), learners' perceptions of being international students (Yayci, 2017), beliefs about the role of teachers (e.g., De Guerrero and Villamil, 2002; Saban et al., 2006; Wan et al., 2011), and teachers beliefs about information and communication technologies (Bas, 2017). A few studies explored metaphors for textbooks. For examples, McGrath (2002) focused on teachers in a book and included a task on metaphors for textbooks. McGrath (2006a) collected 200 images (metaphors and similes) from Brazilian teachers of English, examined their use of metaphoric language, and discussed teachers' views of their English-language teaching textbooks, benefits for teachers and teacher educators of surfacing teachers' beliefs, and varying degrees of textbook dependence. However, learners' beliefs about textbooks, especially EAP textbooks, have not been fully examined and understood.

Learners' beliefs about EAP textbooks are significant for academic English teaching in terms of dealing with the need for a large, academically oriented vocabulary, working with difficult ideas, and combining reading and writing skills to learn and display content (Grabe and Zhang, 2013). Few studies discover underlying and subconscious conceptualization of learners by using metaphors in a EFL setting, particularly in China, academic English teaching is a hotly-debated topic and many universities offer academic English courses which are often considered not satisfactory and textbook is one of the main reasons contributing to this dissatisfaction (Ding and Jiang, 2015). Thus, it is timely and paramount to address quality and issues of EAP textbooks and examine underlying factors that affect academic English teaching from the perspective of teaching material evaluation by using metaphor analysis. The present study discusses metaphors used in relation to one EAP textbook by a sample of 147 first-year EFL graduate students from a public university in China, and it examines these students' beliefs about the importance, quality and efficacy of the EAP textbook through metaphor analysis. Research questions are as follows:

1. What sort of metaphors do Chinese EFL graduate students generally use to describe their EAP textbook?
2. To what extent the EAP textbook is effective in meeting the needs of Chinese EFL graduate students according to learners' viewpoint?
3. What instructional practices and research implications can we work with to provide academic English learning support?

3. Materials and methods

3.1. The context

This study was conducted at a public university of science and engineering in the city of Beijing, China. The total student enrollment of the university was approximately 16,000, with nearly 7,500 students in graduate programs and they met the standardized English language requirements for program entrance. The student participants of the study enrolled in a 16-week, two-credit academic course-- *Academic English Reading and Writing*. The course is a general academic English course for non-English major graduate students of the university, which is also a compulsory course for these students. According to the requirement of the curriculum and aims of syllabus, this course is designed to cultivate students' comprehensive ability to use academic English, especially academic reading, writing and translation skills, so that students can effectively understand English in reading academic materials, use English to write academic papers and express English in future work and social interactions to adapt to social development and the need for international exchanges and cooperation. Besides, these students have to pass College English Test Band 4 (CET-4) and College English Test Band 6

(CET-6). College English test is a competency test designed to measure students' level of English proficiency in the skills. The test has been recognized by the society in China, and has become one of the standards for employment of college graduates by personnel departments at all levels, and has produced certain social benefits. The student participants of the study already passed the CET-4, but all of them, except 3 students, have not passed CET-6, so one of the near future goals of their English learning is to pass this test. In this EFL context, EAP textbooks are the main source of input and contact that students have with the language.

The EAP textbook evaluated in this study was *Academic Encounters: Human Behavior-Reading and Writing* (2017) by Bernard Seal. It was published by Cambridge University Press and Shanghai Foreign Language Education Press. The textbook emphasizes reading skills by broadening vocabulary and focusing on grammatical structures that commonly occur in academic texts. Additionally there are opportunities for practice of academic writing skills including essay writing, text summaries, journal writing, and writing short answers. The book has four units broken down into two chapters, with a preview and three readings in each chapter. Each reading contains the pre- and post-reading activities. The pre-reading activities ask students to quickly find the main idea by skimming and surveying the text for headings, graphic materials, and terms that can provide content clues. After the readings, students are given various tasks including reading comprehension questions, drawing a graph, or performing a role-play. Some language tasks focus on vocabulary and the unique grammatical features of academic texts, which are critical to students' future academic success. Students learn how to highlight a text, take notes, and practice test-taking skills as well as how to work with the organization and style expected in academic writing.

3.2. Participants

The participants of the study are a total of 147 first-year non-English major graduate students. Seventy-seven boys and 70 girls participated in the study. The participants were selected through "conventional sampling" technique so that the researcher could efficiently identify available subjects (Erdogan and Erdogan, 2013).

3.3. Data collection

A collection of student images for the EAP textbook elicited over a one-week period in early 2022 from graduate students. Students had used the book for one semester. They were supplied with a slip of paper on which the stem "the academic English textbook is ... because ..." was given and asked to complete this in writing with a metaphor which represented their attitudes to the textbook, and add a written explanation. Metaphors were used in collecting qualitative data to find out the textbook-related

beliefs of the graduate students participating in the study. Students' demographic information, including gender, major, and CET-4/CET-6 scores, was also collected.

3.4. Data analysis

This study follows a descriptive method to reveal students' beliefs about the EAP textbook. A quantitative method was also used to calculate the frequency and percentage of metaphors. The textbook-related beliefs were analyzed through content analysis method. A total of 158 slips were returned, but the forms of 147 students were included to the study. Remaining 11 forms were not included due to the fact that they did not include a reason related to the metaphors (three), they included more than one metaphor (two), and they did not include any sources (two) or they were not logical (one), and some (three) simply contained statements of views (e.g., "The academic English textbook is important/useful/challenging to learners") rather than images.

There are four stages in the process of analyzing and discussing metaphors: identification of metaphors, categorization of metaphors, category development, and providing validity and reliability. Reliability was established by using inter-analyst agreement. Two researchers analyzed the data, and then they came to an agreement comparing their analysis. Also, three different experts analyzed the categories of metaphors developed in this study to see whether they represent the related category or not. After that, the categorizations made by experts and categorizations made by researchers were compared. After data analysis, discussions of the findings were made accordingly.

4. Findings

Students participated in the study are found to produce a total of 147 metaphors about the beliefs of the EAP textbook. The metaphors appearing to be semantically related were grouped together.

One of the conceptual categories about the textbook metaphor is "joy/enjoyment." Images, such as "movie," and "cake," are included in this category. Table 1 presents the major metaphors of textbook developed under this conceptual category together with their frequency and percentage.

Table 1 shows that there are 40 metaphors under this conceptual category. Examples of the metaphors developed within this category and the reasons of developing these metaphors are as follows:

The textbook is a movie, because the design and the texts are interesting and I enjoy learning.

The textbook is a cake, because it is delicious and looks attractive.

The textbook is mineral water, because it is timely to quench my thirst and give me pleasures.

The textbook is a sports car, because I get excitement from it and it accelerates my learning speed.

Besides, images such as coffee, chocolate, and (beautiful) landscape were mentioned by students. We can see that these images express a predominantly positive view of the textbook, which seems to bring joys and stimulation to these students.

The other conceptual category related to textbook metaphor is that of “security.” Table 2 shows the major metaphors developed within this conceptual category.

Findings given in the Table 2 show that there are 32 metaphors under the “security” concept. Examples of the metaphors developed related to this category and explanations for reasons of developing these metaphors are as follows:

The textbook is a lighthouse, because it is a navigational aid for me to arrive at the destination, and with its help, I know I would reach the end.

The textbook is a game instruction, because it teaches me how to play step by step, and I know what to expect. It seems that learning English is not so difficult.

The textbook is reinforcing (steel) bar, because the book gives me safety and helps to support my building of language.

The textbook is a traffic police, because I trust it, and I would make fewer detours with its help.

The textbook is martial arts secret, because from the book I get the power and I could learn the language secret to become the language master.

Another conceptual category in regard to the textbook metaphors developed by the participants is “grit.” Images that seem to reflect a view of the textbook as basis for persistence in academic English learning (e.g., “scaffolding” and “skeleton”) and the notion of emotional support (e.g., “father”) have been grouped together under “grit.” Table 3 gives the major metaphors of textbook developed related to this conceptual category.

As seen in Table 3, students developed a total of 30 metaphors under the conceptual category of “grit.” Examples of the metaphors in this category and the reasons of developing these metaphors are shown below.

TABLE 1 Frequency and percentage of the textbook metaphor in the conceptual category of “joy/enjoyment.”

Metaphor	<i>f</i>	%
Movie	8	5.44
Cake	6	4.08
Bread	5	3.40
Coffee	3	2.04
Food	3	2.04
Popular science reading	2	1.36
Encyclopedia	2	1.36
Snack	2	1.36
Chocolate	2	1.36
Landscape	2	1.36
Mineral water	2	1.36
Sports car	2	1.36
Marshmallow	1	0.68
Total	40	27.21

TABLE 2 Frequency and percentage of the textbook metaphor in the conceptual category of “security.”

Metaphor	<i>f</i>	%
Lighthouse	4	2.72
Handbook	4	2.72
Instruction book	3	2.04
Compass	3	2.04
Cookbook	3	2.04
Game instruction	2	1.36
Reinforcing bar	2	1.36
Introductory guide	2	1.36
Menu	2	1.36
Traffic police	2	1.36
Flashlight	1	0.68
Engineer	1	0.68
Martial arts secret	1	0.68
Lifesaving straw	1	0.68
Navigator	1	0.68
Total	32	21.77

The textbook is a skeleton, because it laid the foundation for me to grow and supported me to always make efforts.

The textbook is my father, because it supports me, gives me courage so that I can focus my attention and continue my effort.

The textbook is a walking stick, because I can continue and continue ... with its help in this long way of learning even in the face of difficulties.

TABLE 3 Frequency and percentage of the textbook metaphor in the conceptual category of “grit.”

Metaphor	<i>f</i>	%
Helper	4	2.72
Scaffolding	3	2.04
Skeleton	3	2.04
Walking stick	3	2.04
Research paper/report	3	2.04
Paper writing assistant	3	2.04
Tool	3	2.04
Father	2	1.36
Key	2	1.36
Gold hammer	1	0.68
Measure gage	1	0.68
Chopstick	1	0.68
Medicine	1	0.68
Total	30	20.41

TABLE 4 Frequency and percentage of the textbook metaphor in the conceptual category of “curiosity.”

Metaphor	<i>f</i>	%
Hotpot	3	2.04
Car	2	1.36
Iceberg	1	0.68
Sponge	1	0.68
Total	7	4.76

The following related conceptual category concerning the textbook metaphors is that of “curiosity.” This category indicates the students’ beliefs about their textbook as stimulating their curiosities. [Table 4](#) shows the major metaphors developed in this category.

As can be seen in [Table 4](#), students expressed a total of 7 metaphors under this conceptual category. Examples of the metaphors and the reasons of developing these metaphors are noted below.

The textbook is hotpot (Chinese popular food), because it contains many different things. It makes me always want to explore different things.

The textbook is a car, because it gives me different rides, and it meets my desire to see different sceneries and get to different destinations.

The following categories are relatively negative views of students toward the textbook. One of the conceptual categories is “old-fashioned.” Students developed 14 metaphors under this conceptual category (fossil 4, old man 4, *Youth Digest* 2, dictionary

2, spicy strip 1, law book 1). Examples of the metaphors and explanations for the reasons of developing these metaphors are as follows:

The textbook is fossil, because it is out of fashion and the content is not new and creative enough.

The textbook is a serious old man, because the book is old-fashioned and the texts and pictures are out of date.

The textbook is *Youth Digest* (a journal once popular among young people in China for entertainment and general reading), because it looks as usual, and there is no innovation.

The textbook is spicy gluten (popular snack food for under 25s in China), because it is just what I thought and does not provide any new things.

The other conceptual category developed by the participants is the category of “exam-orientated.” Students expressed a total of 12 metaphors under this conceptual category. These students mostly considered the textbook as exam-orientated rather than practice-oriented. This category indicates students’ beliefs about their textbook as being just a tool to pass exams. [Table 5](#) shows the major metaphors of textbook developed in this category.

Examples of the metaphors and the reasons of developing these metaphors are noted below.

The textbook is an instrument for CET-6, because it is just useful for passing exams. I think it should be a masterwork.

The textbook is a calculator, because it is used for exams, and if it were not for exams, I would not use it.

The textbook is an iPhone, because I use it to search and look for vocabulary and prepare for tests.

The last conceptual category concerning the textbook metaphors is that of “teacher-directed.” As can be seen in [Table 6](#), students expressed a total of 12 metaphors under this conceptual category.

These students mostly relate the textbook with lack of self-directed learning training. Examples of the metaphors and their explanations are as follows:

The textbook is a driving instructor, because I just follow the instruction, and without it I cannot drive on my own.

TABLE 5 Frequency and percentage of the textbook metaphor in the conceptual category of “exam-orientated.”

Metaphor	<i>f</i>	%
An instrument for CET-6	4	2.72
A path of passing CET-6	3	2.04
iPhone	2	1.36
Calculator	1	0.68
Reference book for exams	1	0.68
ThinkPad	1	0.68
Total	12	8.16

TABLE 6 Frequency and percentage of the textbook metaphor in the conceptual category of “teacher-directed.”

Metaphor	<i>f</i>	%
Driving instructor	4	2.72
Travel guide	4	2.72
Mold	1	0.68
Written judgment	1	0.68
A book from heaven	1	0.68
Ocean	1	0.68
Total	12	8.16

The textbook is a written judgment, because the teacher has the authority, and we don't know how to defend by ourselves.

The textbook is a book from heaven, because I cannot learn by myself and have to depend on my teacher.

The textbook is an ocean, because it looks mysterious and without teachers' help I cannot find a way.

5. Discussion

The aim of this study has been to draw attention to the value of surfacing learners' beliefs and attitudes to the EAP textbook, and the potential value of metaphors for this purpose. According to [Mcgrath \(2006a\)](#), the image collection can serve both short-term pedagogic and longer-term research purposes. Pedagogic decisions can then be based on this information. Thus, in the classroom setting, the expression of learners' different views may prompt discussion of the source of these views and their possible effects on learning. Implications for how to appropriately design and use textbooks and desired modifications in teacher practices may then emerge.

The metaphors produced by participants are grouped under 7 subcategories. The metaphors produced by approximately 74

percent of the students were grouped in the first four categories, including joy, security, grit, and curiosity. The findings indicate that most students identified the value of the textbook and they mostly conceptualized the textbook as being interesting, helpful, instructive, stimulating/motivating and supportive for their academic English learning. Students considered the textbook as “movie,” “coffee,” “lighthouse,” “game instruction,” “father,” and “martial arts secret” to show their recognition of the good quality of the book or willing acceptance of the role played by the textbook in their academic English learning process. The EAP textbook becomes source of motivator, assistance and inspiration for students to fulfill their academic objectives. It seems that the EAP textbook is effective in meeting the needs of these students according to learners' viewpoint. For examples, they mentioned the textbook provides “pleasures” and “excitement,” and “the design and the texts are interesting” and they “enjoy learning.” It indicates that students mostly focus on design and contents of the textbook that are interesting and attractive, and students are internally motivated. [Horwitz \(2010\)](#) similarly stated students' beliefs affected attitudes, motivation and learning strategies in the foreign language class. Joy, as one of the factors of positive emotions, creates the urge to learn, and promotes creativity. According to [MacIntyre and Gregersen \(2012\)](#), positive emotions could broaden learners' attention and thinking, counter the effects of negative emotions, promote resilience to stressful events, build personal resources, and lead toward greater well being. [Deuri \(2012\)](#) argued that a good English textbook should have an adequate subject matter where psychological needs and students' interests could be met. The EAP textbook in the current study is effective in meeting the psychological needs of students.

Besides, as described by [Graves \(2000\)](#), textbooks having a kind of road map of the course could provide students a sense of security because they know what to expect and what is expected of them. For example, one student mentioned, “the textbook is a cookbook, because I know I can make a delicious meal by following it step by step.” The textbook is helpful “to arrive at the destination,” and gives students “safety” and “power.” [Marginson et al. \(2010\)](#) defined security as “maintenance of a stable capacity for self-determining human agency” (p. 60). [Sawir et al. \(2012\)](#) discussed students' security and believed security was about the exercise of freedoms and the capacity to reach understanding so as to collaborate with others. Security encompasses capacity to act and students were envisioned as active self-determining agents, albeit subject to the external environment. As is known, academic English is associated with complex and abstract ideas, or high cognitive demands and students may meet challenges and difficulties in their learning process ([Ranney, 2012](#)). Students' security is associated with their competence in and confidence with the use of the English language. EAP textbooks in this EFL context as major reference materials or main source of input and contact that students have with the language enable students to understand, cooperate, and exchange with peers and teachers

and to meet requirements of the class. These textbooks may provide security for students to achieve their academic goals.

The textbook also supports students “to always make effort,” gives students “courage,” and helps students to continue “in this long way of learning even in the face of difficulties.” Gritty students are more likely to invest energy and make efforts over a long period of time even when encountering challenges or failures (Teimouri et al., 2020). Grit encompasses two sub-constructs, consistency of interest and perseverance of effort (Duckworth et al., 2007; Duckworth and Quinn, 2009; Robertson-Kraft and Duckworth, 2014). Grit is a trait in students with diligence and endurance to keep working for a goal in spite of various setbacks (Duckworth et al., 2007). It seems that the EAP textbook in this study does meet the needs of students, supports and provides encouragement for students to persist in face of the difficulties and challenges in academic English learning, and it is designed to let students know that if they persist and set goals, they have the capacity to reach these goals. Academic English cannot be easily acquired and requires considerable time and effort to master. In fact, the skill of academic English is one of the most difficult language skills to be acquired by the students, and it was already explained by Cummins (2000), who stated English language learners required substantially longer to acquire academic language than basic conversational fluency in English. The academic English textbook can be designed with consistent learning goals and activities to let students know what they may lack in language-learning ability could be made up for with focus, hard work, and persistence. The textbook could design creative, teacher- or student-led activities relating to the challenges students face and through these activities students could learn how to face the challenges and how to be gritty. Grits are found associated with motivation (Teimouri et al., 2020; Chen et al., 2021), engagement and joy (Wei et al., 2019, 2020), so the textbook could also teach students different learning strategies to motivate students and engage students actively and joyfully in class tasks, so that students could persist in face of difficulties and challenges. As argued by Lodhi et al. (2019), students could benefit from textbooks to fix their motivational strategies.

Curiosity is defined as a need, thirst or desire for knowledge, and it is a control to motivation (Berlyne, 1998). The students with high curiosity will have great desire to question the gaps in the learning, seek exploratory information and knowledge, answer particular questions, and have good attention in learning (Dweck, 2006). Kashdan (2009) also identifies students with high curiosity toward learning are: (1) interested in new things and possessing an open and receptive attitude toward whatever is the target of attention, (2) devote more attention to an activity, remember information better and more likely to persist on tasks until goals are met, (3) have the ability to effectively cope with or make sense of the novelty, ambiguity and uncertainty being confronted during explorations. Some participants in this study indicated that they had the interest and desire to explore new knowledge. The textbook could raise students' attention to the inconsistency between their new and previous knowledge. For examples,

students mentioned that the textbook made them “always want to explore different things,” or meet their desires to “see different sceneries” and “get to different destinations.” Textbook promoting curiosity drives and motivates students to have a deeper level of understanding, fill gaps in knowledge, and solve intellectual problems. The curiosity aroused in situations when learners have no immediate linguistic access to their second language knowledge or they find that there are discrepancies between their fully known first language system and their partly known second language system (Mahmoodzadeh and Khajavy, 2019). Thus, textbook could be designed with the “i+” concept (a concept proposed by Stephen D. Krashen in his *Input Hypothesis*, that is, second language learners acquire languages by understanding input that is a little beyond their current level of competence), that is, the level of the textbook could be a little beyond the current level of students. Then, students could be more actively engaged in learning process, more enthusiastic with the tasks given by teachers.

While the first four categories express a positive attitude toward the textbook, the final three categories, including old-fashioned, exam-orientated and teacher-directed, bring together a range of disaffection or negative reactions to the textbook. We have to admit students with different language proficiencies may have different beliefs and attitudes toward the textbook. Approximately 26 percent of the students conceptualize the textbook as being “out of date,” “not new and creative” or “just useful for passing exams.” Through the metaphors used by these students, they expressed their frustration with the limitations imposed by the textbook, or perhaps they felt the requirement to use a specific textbook was unsuitable. It seems that as for these students, the EAP textbook can be further modified to be effectively meet the needs of them. The inappropriateness of the textbook may raise doubts about the process used to select this textbook or the way in which the textbook is used. Here we have the fairly predictable “fossil,” and the students who supplied “old man” and “calculator” explained that the images expressed their feelings with the aridity of the textbook they used. They believed that the textbook failed to provide relevant and effective linguistic skills, the content was not practical, or connected to students' real life, and it did not cater to learner's educational requirements. These students articulated dissatisfaction about the effectiveness and efficiency of the EAP textbook. From images provided by these students we can learn that they had awareness that the textbook should be creative, practical and student-centered, but the currently used textbook was not designed or appropriately used in this way.

Some students in this study believe the textbook is merely useful for them to pass exams or is just a reference book to look up information tested. They had a sense of utilitarian about the EAP textbook or language learning itself from a negative perspective. Due to the examination-oriented learning context in Asia (Kwok, 2004), most learners learn the target language for concrete purposes such as passing examinations or enhancing the possibility of finding a job (Liu and Huang, 2011; Yu and Geng,

2019). In this EFL context, the textbook, as the main source of input and access that students have with the language, is considered by these students as an exam-oriented instrument since English courses and CET-4/ CET-6 are required for college students in China. It seems that some students did not learn the language in order to use it but merely to take exams, and even after students achieved CET-4/CET-6 onwards, they could not cope with the demands of reading and writing in English in the academic context. This is a matter of textbook use. Besides, according to Lee and Wong (2000), there were wash back effects of the examination on teaching, which perhaps made teachers focus only on areas that would be tested. This evaluation oriented language-learning conception should be shifted. As one student mentioned, “the textbook should be a masterwork” instead of “just useful for passing exams.” The course could be designed to develop students’ multi-competence including comprehensive language ability, humanistic quality, critical thinking and independent learning ability. The materials selected by teachers and the way textbooks are used could contribute much in the development/ improvement of these different competences.

Finally, some students reported, “the teacher has the authority” and “I cannot learn by myself and have to depend on my teacher.” Students developed the awareness that the textbook was teacher-directed and it should be modified to promote their independent learning skills. As one student mentioned, “the textbook is a driving instructor, because I just follow the instruction, and without it I cannot drive on my own.” The autonomy value of a textbook needs to be recognized so that students could learn and try out the exercises in the textbook on their own, even without the instruction from their teachers (Thang et al., 2012). Independent learning skills are vital for academic language and literacy development to meet the demands inside and outside of classroom contexts (Zwiers and Crawford, 2011; Ranney, 2012). Students could develop the ability of independent learning and be trained to use self-directed strategies in their learning process by appropriate using textbooks. Both teachers and learners need the independence and autonomy to take responsibility for their own teaching and learning (Koad and Waluyo, 2021), and materials writers should modify their textbooks accordingly (Harwood, 2005).

On the whole, there are some values of the EAP textbook, which effectively meet the needs of students in this study, and at the same time it is inevitably needed to make appropriate and cogent modifications in the syllabus and materials being taught. Some instructional practices we can work with to provide academic English learning support are as follows.

Firstly, it is suggested to include learner’ self-directed learning strategies as well as instructional kits and teacher guides related to academic English textbooks to help teachers in their effective teaching and expedite students’ learning process. Although some textbooks cannot fully achieve standard, we should not abandon these textbooks, rather, we should strive to improve the quality of textbooks being produced (Harwood, 2005). The importance of textbooks is especially increased in case of language textbooks as

teachers and students lack relevant and authentic material. It is strongly recommended to integrate authentic, innovative, interest grabbing and skill oriented materials in academic English textbooks. In the process of cultivating students’ academic English ability, the EAP materials need to present language that typifies which is commonly encountered by students in the academy, and materials developers need to attend to key features of that language (Wood and Appel, 2014). It is also necessary to promote students’ cross-cultural communication ability to adapt to the internationalization of higher education. Other assistance such as modern educational technology could also be combined and used in textbooks in the process of academic English teaching (Charles, 2012).

Besides, textbooks should not be treated as the only source materials for teaching and learning to avoid over-dependence on them. The over reliance on textbooks can affect not only students but also teachers in their initiative to effectively use and devise materials to suit the needs of students (Thang et al., 2012). It is suggested that teachers flexibly use the EAP textbooks, and provide opportunities for students to use academic English as it is used in professional and academic communities (Dicerbo et al., 2014). Teachers could be more creative and judicious handling the course materials, and in the selection of passages and exercises from the textbook for class use, and not follow blindly what is prescribed (Thang et al., 2012). Teachers could be trained to appropriately use textbooks, comprehensively learn about students’ language level and learning ability, and consider the differences in learners’ beliefs and satisfy students’ needs by addressing their motives behind academic English learning. Various teaching methods, dynamic teaching content, and supplementary teaching materials recommended to students could compensate for the shortcomings of the textbook (Sajjadi, 2011). For instance, scaffoldings and a supportive and comprehensible learning environment provided by teachers are very motivating for English language learners (Carrier, 2016), and various teaching materials and more adaptive teaching practices can be used so that each student can easily find their own relevance and take part in the learning process (Sajjadi, 2011). Teachers also need to break away from their conventional mode of delivering course materials, and embrace innovative approaches that will enable them to create an engaging, stimulating and enriching learning environment for their students (Thang et al., 2012). Based on the findings, it can be suggested that learners also should be aware of their own ideas and understand the origins of these ideas. Thus, both EFL learners and teachers in input-poor environments could share the responsibility for creating positive beliefs regarding EAP textbooks and academic English learning.

6. Conclusion and suggestions for future research

The importance of EAP textbooks in formal educational settings has been widely recognized. The nature and strength

of many of the learner images about the EAP textbook is a striking finding. The images indicate how valuable and significant the EAP textbook is for EFL graduate students in a Chinese university setting and the strength of negative feelings that the textbook can inspire, feelings that may stem from the inherent unsuitability of the book itself or be a product of the way in which it is used by teachers. It is possible to argue that those students with this awareness have the competency of making self-evaluation or can understand that their academic English learning may be improved if they appropriately use EAP textbooks. The materials selection, usage, and evaluation should meet the needs of students and cater to students' linguistic, affective and educational requirements. Some research implications that we can provide academic English learning support are as follows.

According to Mcgrath (2006b), if this happens to be a teacher's first attempt to understand what their learners' feel, to listen to learners' unique voices, this may trigger a new phase in self-development. Eliciting metaphors for textbooks may prove to be just a beginning. This study focuses on students' perspective, and teachers' views on the usefulness of textbooks may differ from those of students. Future research can explore teachers' views and it will be interesting to explore what happens in a university context where teachers do compare metaphors with their students. Besides, follow-up interviews could be carried out in future studies to complement personal analogical statements (Jin and Cortazzi, 2011) to increase the trustworthiness of the metaphor analysis, so that we can further understand whether entailments are positive or negative. Additionally, as Barcelos (2003) and Hart (2009) suggested, metaphor analysis procedures applied to beliefs about second/foreign language teaching and learning need to encompass culturally/contextually-appropriate interaction between different stakeholders such as teacher trainers, policymakers and administrators to further promote academic English teaching and learning in the future studies.

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Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

Ethics statement

The studies involving human participants were reviewed and approved by China University of Petroleum, Beijing. The patients/participants provided their written informed consent to participate in this study.

Author contributions

The author confirms being the sole contributor of this work and has approved it for publication.

Conflict of interest

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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