

# An Exploration into the Role of Pragmatic Learning Strategies and Gender in Game-based Group Dynamic Assessment

Saba Bashiri 

*Ph.D. Candidate in TEFL, Razi University, Iran*

Saman Ebadi\* 

*Professor in Applied Linguistics, Razi University, Iran*

**Received:** July 8, 2023; **Accepted:** October 4, 2023

## Abstract

In line with Vygotsky's sociocultural theory (SCT) of mind, digital game-based language learning (DGBL) and dynamic assessment (DA) offer language learning opportunities via sociocultural engagement. This quantitative study aimed to explore the role of pragmatic learning strategies (PLSs) and gender in game-based group dynamic assessment. Our participants included thirty upper-intermediate EFL learners (15 males and 15 females) from two intact classes taking an English pragmatic course via game-based group dynamic assessment. Following a pre-test, treatment, and post-test design, the participants filled out a PLS inventory to identify the strategies used to tackle L2 conversations in different situations. Besides, all learners were required to write reflective journals following each treatment session. Descriptive statistics and correlation analysis were employed to analyze the data. The findings indicated that memory strategies were most widely used by the participants, i.e., they relied more on memorizing and storing previous pragmatic knowledge. In addition, compensatory strategies were positive but weak predictors of the learners' L2 pragmatic performance, and gender did not impact the learners' use of different PLSs. The study's limitation and its practical and pedagogical implications for educational policymakers, teacher education programs, and L2 instructors were discussed in light of the posed research questions.

**Keywords:** dynamic assessment, game-based learning, gender, L2 pragmatics, pragmatic strategies

---

\*Corresponding author's email: [samanebadi@gmail.com](mailto:samanebadi@gmail.com)

## INTRODUCTION

Having its roots in Vygotsky's sociocultural theory (SCT) of mind (Lantolf, Xi, & Minakova, 2021), dynamic assessment believes in the integrity and inseparability of teaching and assessment (Lantolf 2009; Poehner, 2008). From the viewpoint of this theory, human cognition reaches its utmost potential via interacting with social environments such as instructional settings (VanPatten, Keating, & Wulff, 2020). Two types of dynamic assessment include interventionist and interactionist (Lantolf & Poehner, 2004) the most distinctive feature of which is the type of mediation provision. That is, in the former pre-specified mediational moves are provided, still in the latter mediational moves are open-ended and fine-tuned to the learners' responsiveness (Kushki, Nassaji, & Rahimi, 2022). Both mediational types can be delivered individually or in a group format. Group dynamic assessment (GDA) is either concurrent or cumulative. In concurrent GDA, the whole class interacts with the teacher and contributes to class progression, but in cumulative GDA, extended one-to-one interactions are typical (Ahmadi Safa & Beheshti, 2018). At the core of SCT and dynamic assessment are two key elements: ZPD and mediation. Conceptualized by Vygotsky (1978, 1987), ZPD refers to the emerging abilities that have the potential to be fully developed via receiving support from a mediator (the teacher in educational settings) (Infante & Poehner, 2019). Thus, for Vygotsky (1998), mediation is offered to lead to ZPD development, as SCT considers the human mind to be mediated (Lantolf, 2006) by the surrounding environment, including others' experiences, semiotic tools, and cultural artifacts (Huong & Hung, 2021). From the SCT's perspective, digital tools are considered useful tools to mediate EFL learners' developmental processes (Huong & Hung, 2021). Therefore, this study will use a digital game as a technological tool for mediating learners' progress.

Incorporating digital games for language learning purposes is called gamification (Wiggins, 2016), which is considered one of the valuable properties in educational settings (Vidergor, 2021). In addition, several

pedagogical benefits of game-based language learning have been enumerated in the literature for different language components and skills, including online feedback provision and active engagement (Connolly et al., 2012; Wichadee & Pattanapichet, 2018), learner-friendly content (Hunt-Gómez et al., 2020), and increased motivation and content engagement (Eltahir et al., 2021).

In a nutshell, pragmatics means implementing proper vocabulary and grammar according to cultural norms (Brown, 2022), which are inseparable elements of L2 education (Lin & Wang, 2018). In other words, L2 pragmatic competence implies that a person has knowledge of the L2 culture and values the culture and the people from that culture (Wang, 2020). Making L2 learners aware of the cultural norms and cues necessitates adopting innovative instructional endeavors (Ajabshir, 2018; Brown, 2022). As innovative technological tools, digital games can be successfully implemented for L2 pragmatic instruction (Burk, 2021; González-Lloret, 2019). Since little attention has been paid to L2 pragmatic instruction through the medium of digital games (Poole & Clarke-Midura, 2020; Xu et al., 2020), this study will examine the impact of the interplay between digital games and group dynamic assessment on EFL learners' pragmatic competence with the mediating role of pragmatic learning strategies (PLSs).

Coined by Cohen (2005), PLSs involve making choices about the appropriate speech acts concerning politeness aspects, proper vocabulary and structure, and the interlocutors' power relations (Tajeddin & Malmir, 2015). Cohen (2005, 2010) argued that pragmatic strategies play a crucial role in developing L2 pragmalinguistic forms and sociopragmatic norms (Cohen, 2005, 2010), the former has to do with correct linguistic forms, while the latter is concerned about appropriate social norms (Félix-Brasdefer, 2021).

## **LITERATURE REVIEW**

### **L2 Pragmatic Competence**

Pragmatics refers to how language is used in context (Félix-Brasdefer & Shively, 2021), specifically the choices made by L2 speakers in social

interactions and their impact on others, (Crystal, 1997). By extension, L2 pragmatics focuses on the development of pragmatic competence in L2 learners, including the ability to produce different speech acts (Félix-Brasdefer & Shively, 2021). Requests are one of the most widely investigated speech acts (Derakhshan & Shakki, 2021; Taguchi & Li, 2020). Appropriateness in the request speech act prevents communication breakdowns and unintentional offenses (Taguchi, 2006) and calls upon both linguistic and cultural expertise (Lee, 2015). Digital platforms and games are effective tools for providing L2 learners with dynamic and accessible pragmatic input, allowing them to develop pragmatic skills and strategies in a contextualized environment (González-Lloret, 2021; Sykes, 2018) and empower learners to focus on and engage in contextual varieties (Sykes, 2017). Traditional classrooms often lack authentic communicative situations and sufficient exposure to cultural norms and variations. (Diepenbroek & Derwing, 2013; Nguyen, 2011; Taguchi, 2018).

## **Pragmatic Learning Strategies**

PLSs refer to a set of resources utilized by L2 learners for using and learning speech acts (Cohen, 2005) and imply an assistance mechanism summoned from already acquired language (Cohen, 2014). These strategies help the learners to focus on the pragmatic phenomenon and equip them to handle self-directed out-of-classroom communications (Taguchi, Tang, & Maac, 2019). Cohen (2005) is reputed for being the first person to generate typologies of pragmatic learning strategies. The most widely-used taxonomy presents a typology of PLSs within six domains (also used in this study). The cognitive and metacognitive domains, respectively, have to do with pragmatic knowledge construction and transformation, monitoring, and evaluating the process of strategy use, such as setting goals and paying direct attention (Taguchi, 2018). The affective domain is concerned with the emotional aspects of pragmatic learning, while the social dimension involves L2 learners' interactions with the L2 speech community (Oxford, 2011). Finally,

as their names suggest, the memory and compensatory dimensions are in charge of storing and memorizing the pragmatic knowledge (Cohen, 2019) and compensating for missed or misunderstood pragmatic knowledge (Tajeddin & Malmir, 2015), respectively. From an SCT perspective, making learners aware of these strategies leads to self-regulated learning, which deepens their learning awareness through the interplay among dialogic interactions, tools, and the embedded context (Gao & Hu, 2020).

PLSs have been widely explored in L2 pragmatic research. Malmir and Derakhshan's (2020) mixed-methods research explored the type of L2 pragmatic comprehension strategies used by male and female Iranian EFL learners and scrutinized any discrepancies in strategy use between the two genders. They identified three pragmatic comprehension strategies used by the participants, including socio-pragmatic, lexico-pragmatic, and cognitive strategies. Besides, there was no significant difference between males and females regarding the strategies used. Derakhshan et al. (2021) investigated the contribution of PLSs to 361 Iranian EFL learners' pragmatic knowledge via an inventory. They found that all PLS domains were conducive to L2 pragmatic knowledge. Specifically, social and cognitive dimensions were moderate contributors to pragmatic knowledge, but compensatory and affective PLSs were very weak contributors. In a newly developed dichotomy of direct and indirect pragmatic learning strategies, Tajeddin and Bagherkazemi (2021) investigated the relationship between PLSs use and 117 Iranian EFL learners' speech act knowledge. They concluded that explicit PLSs were positively correlated with the participants' speech act knowledge, hence being advantageous for enhancing pragmatic knowledge. More recently, Derakhshan et al., (2023) explored the impact of learner variables, including gender, age, L2 learning experience, and proficiency level on using different PLSs among 60 Iranian EFL learners using a PLS scale. The results indicated that learners' age contributed to their amount of using PLSs but males and females did not significantly differ in using the PLSs. Furthermore, L2 learning experience and proficiency level were conducive to the learners'

PLS use patterns, i.e. the longer the L2 learning experience and the higher L2 proficiency, the more the amount of using PLSs.

### **SCT and Technology-aided (G)DA in L2 and L2 Pragmatics**

So far, a meager body of studies has been conducted to investigate the combined effects of technological tools and group-based dynamic assessment in L2 pragmatics. Implementing mobile-mediated GDA by Rassaei (2021) is a case in point. He tried to assess and improve request speech acts production via smartphones among 48 intermediate Iranian EFL learners. The experimental group was provided with corrective feedback during mediational sessions, but the control group, taught in non-DA classes, was deprived of mobile-based mediation. The results revealed that mobile-mediated GDA was influential in furthering the participants' L2 request production in both form and appropriateness, as well as their pragmatic knowledge gains. Comparing GDA and computerized DA (CDA) is another line of research followed by Ghahderijani et al., (2021), who investigated their effectiveness in speech act production among 90 upper-intermediate male EFL learners. GDA and CDA interventions were presented to two experimental groups, preceded and followed by pre-and post-tests, respectively, while the non-DA class was taught traditionally. The results showed that DA assessment could contribute more to complex, accurate, and fluent pragmatic production, significantly when aided by technology, i.e., CDA.

Other L2 components and skills have also been investigated in computerized GDA classes. For instance, Bakhoda and Shabani (2019) investigated the ZPD modifications of seven male and five female intermediate Iranian EFL learners using computer software in a reading comprehension course. The findings indicated that computerized CDA made it possible to determine the group's ZPD level. Besides, visual and textual mediations offered by the software assisted the instructor in mediating the group's ZPD. Fifty-two ELF learners' pragmatic understanding speed and

accuracy in GDA and CDA classes were compared by Malmir and Mazloom (2021). They concluded that GDA sped up pragmatic comprehension, whereas CDA was more accurate-friendly. More recently, using the CoolSpeech program, Delvand and Heidar (2022) investigated the effects of computerized GDA on the listening comprehension of 70 male and female EFL learners. The findings showed that employing the software in the GDA interventions increased the method's effectiveness and that there were no appreciable gender differences in listening comprehension.

### **DGBL in L2 Pragmatics**

Although the variety of digital games makes them appealing technologies to L2 pragmatic researchers (González-Lloret, 2022), systematic literature reviews pinpointed the scarcity of such studies (Poole & Clarke-Midura, 2020; Xu et al., 2020). In an early study, Sykes (2013) developed a 3D game called Croquelandia to explore its effectiveness for performing Spanish request and apology speech acts, the results of which showed little performance gains. The researcher attributed these results to the kind of tasks and feedback provision, i.e., feedback was not delivered from multiple sources. In a qualitative study by Tang and Taguchi (2020) *Questaurant* digital game, a scenario-based platform, was utilized to instruct Chinese formulaic expressions to 12 learners. The overall interview results showed the learners' satisfaction with the engaging contextualized interactions they experienced in the game. In addition, they conceived of the received feedback as a valuable attribute because they found out the reason for their failure/success in selecting certain expressions. Tang and Taguchi (2021) used the same game in an experimental study to compare it with an interactive online lesson to teach Chinese formulaic expressions. The results showed an equal knowledge gain in producing and recognizing formulaic expressions, although the motivation questionnaire results attested to the game group's higher motivation. To improve L2 speech act comprehension among Iranian EFL learners, Shakouri, Malmir, and Esfandiari (2022)

compared the effects of non-computer-mediated instruction (NCMI), computer-mediated instruction (CMI), multiuser virtual environments (MUVes), and mobile augmented reality games (MARGs). The results showed that MUVE enhanced pragmatic comprehension. Additionally, students in the NCMI and CMI groups made more significant strides in pragmatic comprehension than in the MARGs.

## **PURPOSE OF THE STUDY**

This study is the first to merge group dynamic assessment, digital game-based learning (DGBL), and strategic-based pragmatic learning. This amalgamation is justified since, on the one hand, performing language according to L2 speech community norms seems challenging for L2 learners (Barron, 2012; Culpeper, Mackey, & Taguchi, 2018), thus; enhancing L2 learners' pragmatic learning strategies might lead to reduced pragmatic failure and improved pragmatic knowledge base (Cohen, 2005). On the other hand, developing strategic, pragmatic learning contributes to self-regulated learning and enhanced learner autonomy (Redmer, 2022; Taguchi, 2018; Taguchi et al., 2019), both of which are highly endeavored after and favored by SCT and dynamic assessment (Ebadi & Rahimi, 2019; Ebadi & Saeedian, 2015, 2016; Ritonga et al., 2022) as well as digital game-based language learning (Fuchs, Hauck, & Dooly, 2021; Kaya & Sagnak, 2022; Pham, Nguyen, & Le, 2021). Moreover, to our knowledge, so far, scant attention has been directed to exploring how learner variables in general (Taguchi, 2017) and learner gender in particular (Malmir & Derakhshan, 2020; Taguchi, Li, & Liu, 2013) may impact using pragmatic learning strategies. Therefore, this study will also explore gender differences in using various pragmatic learning strategies in L2 request production. In L2 pragmatic instruction, the request is one of the core speech acts (Shakki et al., 2020) that needs profound cultural awareness and linguistic repertoire (Blum-Kulka & Olshtain, 1984; Derakhshan & Shakki, 2021).



*Trace Effects* is the digital game used in this study to further the learners' competence in request production. Funded by the United States Department of State, this online adventure game was developed by a game designer company and a group of TESOL professionals and researchers (Bado, 2014). As the game requires the player to interact with other characters using appropriate and accurate language use (Bado, 2014; Bado & Franklin, 2014) and necessitates paying attention to the American culture and society, we assumed it is a helpful tool for targeting different English skills, including pragmatics (Hanson-Smith, 2013; Rogers, 2014). This game is specifically designed for high school EFL learners aged 12-16 to expose them to authentic cultural input via an immersive environment (American English, 2012; Regional English Language Office for the Andean Region, 2012). To address the above-mentioned gaps, the following research questions will be investigated:

1. What pragmatic learning strategies are used by EFL learners?
2. What pragmatic learning strategies correlate with the EFL learners' pragmatic performance?
3. What is the impact of the EFL learners' gender on using pragmatic learning strategies?

## **METHOD**

### **Design**

This quantitative study involved collecting quantitative data via an online questionnaire preceded by a pre-test, treatment, and post-test experimental design. In addition, during the treatment sessions, the participants were supposed to take journals of their pragmatic learning process. Learner journals pave the way for popping up valuable insights into the language learning process that might be otherwise not discernible from a researcher-only point of view (Mackey & Gass, 2015).

### **Participants**

Our participants were a convenient sample of 30 male and female EFL learners from two intact classes taking an English communication course at a private language school in Kamyaran, Iran. All the participants were homogeneous concerning their first language (Kurdish) and proficiency level (upper intermediate). Their ages ranged from 14-16. They were taught by the same instructor (one of the researchers) and had no prior exposure to game-based GDA instruction. They were evenly divided into two groups, i.e., one male and one female, to explore gender differences in using PLSs.

## **Instrumentation**

### ***Written Discourse Completion Test***

Participants' L2 request production ability was assessed via parallel written discourse completion (WDCT) pre- and post-tests the items of which were either adopted/adapted from different studies (Malmir, 2020; Rassaei, 2021; Taguchi, 2011) or selected from language practice activities of the *Trace Effects* game. WDCT is known as a reliable and valid test to assess pragmatic knowledge (Duan, 2012; Liu, 2004; Hudson2001). The items included different situation types considering three social variables (social distance, power difference, and degree of imposition). The Alpha coefficient of the items was 0.81. Appendix A includes examples for both low (equal power relations, small distance, and small degree of imposition) and high (unequal power relations, large distance, and large degree of imposition) situations. Pre- and post-tests were assessed by three EFL teachers who were experienced L2 communication instructors. They were supposed to assess both pragmalinguistic correctness and sociopragmatic appropriateness on a five-point Likert scale, ranging from 0 to 5. The sum of these scores was used for analysis. Inter-rater reliability of the scores was 0.86.

### ***Pragmatic Learning Strategies Questionnaire***

A taxonomy of PLSs was first provided by Cohen (2005), who defined them as a range of strategies used by language learners to acquire knowledge about

speech acts more effectively. To delve into the PLSs used by the participants, a 68-item questionnaire adapted from Tajeddin and Malmir (2015) was designed in Google Forms, the link of which was shared to the participants' accounts on WhatsApp social network. This inventory identifies L2 learners' PLS within six domains of memory PLS (8 items), cognitive PLS (23 items), metacognitive PLS (9 items), social PLS (8 items), compensatory PLS (9 items), and affective PLS (11 items). To prevent any miscomprehensions, the questionnaire items were translated into Persian. The English version of the inventory is presented in Appendix B. The Cronbach's reliability index of this scale is 82.

### *Trace Effects*

Being a collaborative English digital game, the *Trace Effects* game takes the players on a 3D multimodal journey through the USA, especially cultural locations (United States Department of State, 2012). The player plays the role of the main character Trace, who is a student from the future. Trace has to complete the missions of each chapter (seven chapters in total) to go home. Communicational interactions involve selecting from the options provided by the game. The key to progressing the game and succeeding in the missions is continued exploration and interaction with other characters using the collected items and action words floating in the game atmosphere, as well as choosing the appropriate form of requesting from the audience character(s). The fact that this game exposes the players to American culture and pragmatics (An & Nhung, 2015; Hanson-Smith, 2013) and appropriateness is a core criterion for judging L2 request forms (Taguchi & Li, 2020) justifies using the game for this study. In addition, L2 learners' self-directed pragmatic strategy use might maximize pragmatic learning in DGBL (Cohen, 2005; Taguchi, 2020; Taguchi et al., 2019).

### *Learner Journals*

We asked all the learners to write journals in Persian after each treatment session. The journals concerned their language learning experiences while engaged in DGBL GDA classes. Before starting the treatment sessions, one of the researchers (the instructor) provided guidelines on journal writing emphasizing the used pragmatic strategies. However, they were not forced to write anything in favor of the instructor.

## Data Collection Procedures

The total duration of the trial was nine weeks and twelve sessions. To evaluate their L2 pragmatic proficiency in request production, the WDCT was administered to all participants as a pre-test during the first session. The participants were led through the game during the second session. Sessions three through ten included treatment sessions that lasted an hour and a half each. These sessions consisted of teaching the students in a group dynamic assessment class as they played *Trace Effects* and attempted to fulfill each chapter's mission. In each session, four to five students were chosen at random to play the game while their performance was displayed on an overhead projector. The learners received immediate one-on-one feedback employing emergent mediational moves in a cumulative way, following interactionist cumulative DA principles. The WDCT test served as the post-test for session 11. In session 12, the experimental groups received the PLSs questionnaire online.

## Data Analysis

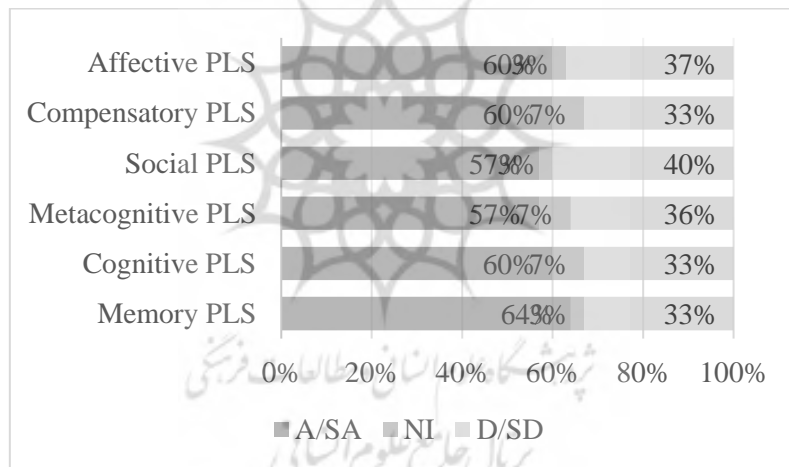
SPSS 26.0 was used to analyze the quantitative data from the PLS inventory. To determine which PLS is utilized more frequently by the learners, the participant replies to the PLS questionnaire were examined in SPSS (descriptive statistics including percentage). The second research question, which looked at the relationships between PLSs and post-test results for the groups, was addressed by correlation analysis. The answers to the first two questions were supported by student journals. ANOVA was used to

demonstrate gender disparities in the usage of various pragmatic learning strategies to address research question three.

## RESULTS

### The Used PLSs

Research question one examined pragmatic learning strategies used by the male and female groups. Descriptive statistics (percentage) of the survey results in SPSS were calculated to find out the used pragmatic learning strategies. Figure 3 summarizes the survey results divided by its subscales. For the sake of saving space and being more reader-friendly the percentages of negative and positive options are summed up under a single category.



**Figure 1.** Analysis of participants' survey responses

As shown in Figure 1, almost all pragmatic learning strategies were frequently used by our participants in the experimental groups; but, most students resorted to memory-related PLSs (64% A/SA) while performing L2 pragmatic tasks. After the memory, PLS, cognitive, and affective PLSs were used more. On the other hand, social PLSs (40% D/SD) were the least used PLSs compared to other categories.

## Gender Impacts on Using PLSs

The second research question probed the role of the groups' gender in using PLSs. ANOVA was conducted to find out whether gender impacts the patterns of using PLSs or not. Table 1 shows that the groups' gender did not impact their use of PLSs.

**Table 1:** ANOVA results for the impact of gender on using PLSs

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.343	1	.343	.364	.551
Within Groups	26.357	28	.941		
Total	26.700	29			

## PLSs Impact on L2 Pragmatic Competence

The third research question examined the correlations between different PLS categories on the group's performance in the post-test. Correlational analysis indicated that among all PLSs, compensatory ones correlated slightly and positively with the experimental groups' performance in the post-test. As shown in Table 2 the correlation coefficient of compensatory PLS is 0.048. This indicates that those learners who relied on compensating for their communication breakdowns performed better in their post-tests.

**Table 2:** Correlation coefficient of the PLSs and the post-test scores

Spearman's rho	Scores	Correlation Coefficient	affective	compensatory.	metacognitive.	social.	cognitive.	memory.
			PLS	PLS	PLS	PLS	PLS	PLS
			.131	.363*	.196	.240	.096	.245
		Sig. (2-tailed)	.492	.048	.300	.202	.613	.192
		N	30	30	30	30	30	30

## DISCUSSION

This study discussed the potential usefulness of strategic-based L2 pragmatic instruction within a DGBL GDA course for developing L2 request production. Former research in technology-aided (G)DA (Andujar, 2020; Delvand & Heidar, 2022; Ghahderijani et al., 2021; Rassaei, 2021; Rezaee, Alavi, & Razzaghifard, 2019), DGBL (Shirazi, Ahmadi, & Mehrdad, 2016; Tang & Taguchi, 2020, 2021), and strategic-based pragmatic instruction (Redmer, 2022; Taguchi, 2018; Taguchi et al., 2019) illuminated the potential usefulness of these methods to alleviate problems of L2 pragmatic learning. About the first research question, the memory PLS was the one that our participants used the most. This suggests that they rely more on remembering and preserving their earlier pragmatic knowledge. The fact that the inventory was given to our participants both after the intervention and after the post-test revealed that they relied heavily on memorization of pragmatic rules when completing L2 request tasks. The reflective journals of participants also attested that when facing a challenge during the GDA sessions, they usually tried to remember prior mediations offered to them and their peers, the information from previous chapters, and their prior pragmatic knowledge. According to Cohen (2019), memory PLS is crucial for organizing and storing pragmatic knowledge, particularly when dealing with previously acquired pragmatic knowledge. In a similar vein, because memory-based methods are psycholinguistic and neurolinguistic in nature (Cohen, 2010; Tajeddin & Aalmir, 2015), they are tasked with assisting students in matching freshly learned material to previously learned material and restoring them (Malmir, 2020). From our perspective, the learners' memory abilities were cultivated by the immediate corrective feedback given to them during the GDA sessions.

It is thought that learners' retrieval capacities are boosted and they can fix their errors more quickly when they instantly engage in corrective feedback, especially in pragmatic activities (Maraver et al., 2022). In particular, providing corrective feedback can help learners learn and comprehend the pragmatics of L2 speech acts (Taguchi, 2010), which in turn

can promote strategic pragmatic learning as students attempt to pay attention to multiple aspects (directing attention, memorization, form-function matching) at once. Cohen (2019) contends that memory strategies aid in the consolidation of the pragmatic knowledge attained originally by relying on cognitive and metacognitive PLSs, even though the results demonstrate that our participants utilized memory PLSs more frequently. This suggests that some students might not be aware of the variety of strategies they employ. It is important to note that some PLSs have diverse functions depending on the dynamics of various sociocultural situations; for example, metacognitive PLSs also use memory functions (Derakhshan et al., 2023).

According to the correlation analysis used to address the second research question, compensatory PLSs were substantial but weak predictors of improved L2 performance which is in line with Derakhshan, Malmir, and Greenier, (2021). In our opinion, GDA interactions were a main source for compensating the breakdowns. The fact that the learners relied on the teacher's instant feedback and their peers' performance while playing the game justifies this claim. In addition, resorting to Persian translation was one of the explicit mediational moves which was a helpful compensation strategy for better performance in the game. Therefore, learners who could make up for their limited pragmatic knowledge tended to perform slightly better in L2 pragmatic tasks despite the existing knowledge gaps (Oxford, 1989). Although the influence of other PLSs on pragmatic performance was insignificant, learners' journals revealed that they tended to monitor and evaluate their performance in the course. This emanated from the nature of the course. That is, independence and autonomy in learning are major contributions of DGBL (Lewis, 2014; Reinhardt & Thorne, 2020; Soyooof, Reynolds, Vazquez-Calvo, & McLay, 2021) and GDA (Alkhudiry, 2022; Lantolf & Thorne, 2007; Murray, 2014). In addition, the ZPD-tuned mediations in GDA (Malmir, 2020) and the immersive DGBL environment, guaranteed improved future L2 performance (Ghiat, 2022) by fostering the learners to use more social PLSs. This was evident in the learners' journals when they admitted that direct interaction with the game characters and the



teacher and indirect interaction with their peers led to more social engagement.

In terms of the third research question, our participants' gender did not have an impact on the patterns of PLS use, which is consistent with previous PLS research results (Derakhshan et al., 2023; Malmir & Derakhshan, 2020; Tajeddin & Malmir, 2023). However, in pragmatic research (Cohen, 2010; Geluykens & Kraft, 2002; Geluykens & Kraft, 2007), gender is one of the learner characteristics that influence successful use of PLS and pragmatic performance patterns. This contradiction may have its roots in research showing that male and female L2 pragmatic performance differs and that these disparities may be present when utilizing PLS. This data supports the notion that, despite gender variations in the use of politeness techniques and degrees of indirectness in requests (Lorenzo-Dus & Bou-Franch, 2003), both genders use the same PLSs while completing L2 pragmatic tasks.

## **CONCLUSION AND IMPLICATIONS**

The results of this study indicated the importance of gender and pragmatic learning strategies in DGBL GDA classes. The findings of the current study suggest that strategic-based L2 pragmatic instruction via DGBL GDA has a high potential to behoove EFL learners with independent, autonomous L2 performance. Given that PLSs are malleable as a result of training and instruction educational game designers and L2 instructors are recommended to foster EFL learners' awareness and use of these strategies. Another promising implication of the findings is for educational policymakers and teacher education programs to equip in-service and prospective EFL teachers with skills for the successful incorporation of DGBL and GDA, particularly fostering learners' strategic learning.

Like any other study, this study had some constraints. As for our sampling method, i.e. convenient sampling, caution is needed when generalizing the results. Another limitation has to do with the small sample size. Prospective researchers are encouraged to employ random sampling

methods with more participants to remedy these shortcomings. Future researchers might want to explore the effect of using different PLSs on L2 pragmatic competence from the learners' viewpoints, i.e. follow-up interviews may render more insightful comments. Finally, the L2 pragmatic instruction domain needs longitudinal large-scale studies to elucidate the effectiveness of strategic-based DGBL GDA over time.

### Disclosure statement

No potential conflict of interest was reported by the authors.

### ORCID

Saba Bashiri



<http://orcid.org/0000-0002-5282-1666>

Saman Ebadi



<http://orcid.org/0000-0001-8623-7751>

### References

- Ahmadi Safa, M., & Beheshti, S. (2018). Interactionist and interventionist group dynamic assessment (GDA) and EFL learners' listening comprehension development. *Iranian Journal of Language Teaching Research*, 6(3 (Special Issue)), 37-56.
- Ajabshir, Z. F. (2018). The effect of synchronous and asynchronous computer-mediated communication (CMC) on EFL learners' pragmatic competence. *Computers in Human Behavior*, 92, 169-177.
- Alkhudiry, R. (2022). The contribution of Vygotsky's sociocultural theory in mediating L2 knowledge co-construction. *Theory and Practice in Language Studies*, 12(10), 2117-2123.
- American English. (2012). *Trace Effects: A video game for learning American English and culture*. Retrieved from <http://americanenglish.state.gov/trace-effects>
- An, N. D., & Nhung, T. H. (2015, November). *Trace effects- A new gate to American culture* [conference presentation]. The second international VietTESOL conference. Hanoi, Vietnam. 192-199.

- Andujar, A. (2020). Mobile-mediated dynamic assessment: A new perspective for second language development. *ReCALL*, 32(2), 178-194.
- Bado, N. (2014). *Video games and English as a foreign language education in Burkina Faso* (Doctoral dissertation, Ohio University).
- Bado, N., & Franklin, T. (2014). Cooperative game-based learning in the English as a foreign language classroom. *Issues and Trends in Educational Technology*, 2(2), 1-17.
- Bakhoda, I., & Shabani, K. (2019). Enhancing L2 learners' ZPD modification through computerized-group dynamic assessment of Reading comprehension. *Innovation in Language Learning and Teaching*, 13(1), 31-44.
- Barron, A. (2012). Interlanguage pragmatics: From use to acquisition to second language pedagogy. *Language Teaching*, 45(1), 44-63.
- Blum-Kulka, S., & Olshtain, E. (1984). Requests and apologies: A cross-cultural study of speech act realization patterns (CCSARP). *Applied Linguistics*, 5(3), 196-213.
- Brown, Z. B. (2022). *Pragmatics in game activities, humor, and technology in second language learning*. (Master Thesis, Utah State University)
- Burk, B. (2021). *Collaborative classrooms: Incorporating pragmatics and technology in language learning with a focus on generation 1.5*. (Master Thesis, Utah State University).
- Cohen, A. D. (2005). Strategies for learning and performing L2 speech acts. *Intercultural Pragmatics*, 2(3), 275-301.
- Cohen, A. D. (2010). Strategies for learning and performing speech acts. In N. Ishihara and A. D. Cohen (Eds.). *Teaching and learning pragmatics: Where language and culture meet*, (pp. 227-243). Oxford shire, UK: Routledge.
- Cohen, A. D. (2014). *Strategies in learning and using a second language*. New York, NY: Routledge.
- Cohen, A. D. (2019). Strategy instruction for learning and performing target language pragmatics. *Learning strategy instruction in the language classroom: Issues and implementation* (pp. 140-152). Bristol, Blue Ridge Summit: Multilingual Matters.
- Connolly, T. M., Boyle, E. A., MacArthur, E., Hainey, T., & Boyle, J. M. (2012). A systematic literature review of empirical evidence on computer games and serious games. *Computers & Education*, 59(2), 661-686.

- Crystal, D. (1997). *The Cambridge encyclopedia of language*. Cambridge, UK: Cambridge University Press.
- Culpeper, J., Mackey, A., & Taguchi, N. (2018). *Second language pragmatics: From theory to research*. New York, NY: Routledge.
- Delvand, S. A., & Heidar, D. M. (2022). The impact of computerized group dynamic assessment on Iranian EFL learners' listening comprehension across gender. *Journal of Language Horizons*, (6)1, 205-224.
- Derakhshan, A., Malmir, A., & Greenier, V. T. (2021). Interlanguage pragmatic learning strategies (IPLS) as predictors of L2 speech act knowledge: A case of Iranian EFL learners. *The Journal of Asia TEFL*, 18(1), 235-243.
- Derakhshan, A., Malmir, A., Pawlak, M., & Wang, Y. (2023). The use of interlanguage pragmatic learning strategies (IPLS) by L2 learners: the impact of age, gender, language learning experience, and L2 proficiency levels. *International Review of Applied Linguistics in Language Teaching*, 1-24. <https://doi.org/10.1515/iral-2022-0132>
- Derakhshan, A., & Shakki, F. (2021). A meta-analytic study of instructed second language pragmatics: A case of the speech act of request. *Journal of Research in Applied Linguistics*, 12(1), 15-32.
- Diepenbroek, L. G., & Derwing, T. M. (2013). To what extent do popular ESL textbooks incorporate oral fluency and pragmatic development. *TESL Canada Journal del30*, 7, 1-20.
- Ebadi, S., & Rahimi, M. (2019). Mediating EFL learners' academic writing skills in online dynamic assessment using Google Docs. *Computer Assisted Language Learning*, 32(5-6), 527-555.
- Ebadi, S., & Saeedian, A. (2016). Exploring transcendence in EFL learners' reading comprehension through computerized dynamic assessment. *Iranian Journal of Language Teaching Research*, 4(1), 27-45.
- Ebadi, S., & Saeedian, A. (2015). The effects of computerized dynamic assessment on promoting at-risk advanced Iranian EFL students' reading skills. *Issues in Language Teaching*, 4(2), 26-1.
- Eltahir, M. E., Alsalhi, N. R., Al-Qatawneh, S., AlQudah, H. A., & Jaradat, M. (2021). The impact of game-based learning (GBL) on students' motivation, engagement and academic performance on an Arabic language grammar course in higher education. *Education and Information Technologies*, 26(3), 3251-3278.

- Félix-Brasdefer, J. C. (2021). Pragmatic competence and speech-act research in second language pragmatics. In *New directions in second language pragmatics* (pp. 11-26). Berlin, Boston: De Gruyter Mouton.
- Félix-Brasdefer, J. C., & Shively, R. (Eds.). (2021). *New directions in second language pragmatics* (Vol. 356). Berlin, Boston: De Gruyter Mouton.
- Fuchs, C., Hauck, M., & Dooly, M. (Eds.). (2021). *Language education in digital spaces: Perspectives on autonomy and interaction*. New York, NY: Springer Cham.
- Gao, X. A., & Hu, J. (2020). From language learning strategy research to a sociocultural understanding of self-regulated learning. *Autonomy in Language Education* (pp. 31-45). New York, NY: Routledge.
- Geluykens, R., & Kraft, B. (2002). Complaining in French L1 and L2: A cross-linguistic investigation. *EUROSLA Yearbook*, 2(1), 227-242.
- Geluykens, R., & Kraft, B. (2007). Gender variation in native and interlanguage complaints. In B. Kraft, & R. Geluykens (Eds.), *Cross-cultural pragmatics and interlanguage English* (pp. 143– 158). Muenchen: Lincom-Europa.
- Ghahderijani, B. H., Namaziandost, E., Tavakoli, M., Kumar, T., & Magizov, R. (2021). The comparative effect of group dynamic assessment (GDA) and computerized dynamic assessment (C-DA) on Iranian upper-intermediate EFL learners' speaking complexity, accuracy, and fluency (CAF). *Language Testing in Asia*, 11(1), 1-20.
- Ghiat, S. (2022). *Integrating dynamic assessment in oral courses to develop EFL students' pragmatic competence: The case of year students at the department of English Batna2 University*. (Doctoral Dissertation, Université de Batna 2).
- González-Lloret, M. (2019). Technology and L2 pragmatics learning. *Annual Review of Applied Linguistics*, 39, 113-127.
- González-Lloret, M. (2021). L2 pragmatics and CALL. *Language Learning & Technology*, 25(3), 90-105.
- González-Lloret, M. (2022). Technology-mediated tasks for the development of L2 pragmatics. *Language Teaching Research*, 26(2), 173-189.
- Hanson-Smith, E. (2013, March). Trace Effects/language effects: Scripting for a language practice adventure Game. In *CALL IS Academic Session. TESOL Convention, Dallas, TX*.

- Hunt-Gómez, C. I., Moreno-Fernández, O., Moreno-Crespo, P., & Ferreras-Listán, M. (2020). Escape rooms' pedagogical potential from female future teachers' perspectives. *Journal of University Teaching & Learning Practice*, 17(5). Retrieved from <https://doi.org/10.14453/jutlp.v17i5.7>.
- Huong, L.P.H., & Hung, B. P. (2021). Mediation of digital tools in English learning. *LEARN Journal: Language Education and Acquisition Research Network*, 14(2), 512-528.
- Infante, P., & Poehner, M. E. (2019). Realizing the ZPD in second language education: The complementary contributions of dynamic assessment and mediated development. *Language and Sociocultural Theory*, 6(1), 63-91.
- Kaya, G., & Sagnak, H. C. (2022). Gamification in English as second language learning in secondary education aged between 11-18: A systematic review between 2013-2020. *International Journal of Game-Based Learning (IJGBL)*, 12(1), 1-14.
- Kushki, A., Nassaji, H., & Rahimi, M. (2022). Interventionist and interactionist dynamic assessment of argumentative writing in an EFL program. *System*, 107. Retrieved from <https://doi.org/10.1016/j.system.2022.102800>
- Lantolf, J. P. (2006). Sociocultural theory and L2: State of the art. *Studies in Second Language Acquisition*, 28(1), 67-109.
- Lantolf, J. P. (2009). Dynamic assessment: The dialectic integration of instruction and assessment. *Language Teaching*, 42(3), 355-368.
- Lantolf, J. & Thorne, S. L. (2007). Sociocultural theory and second language learning. *Theories in second language acquisition* (pp. 201-224). Mahwah, NJ: Lawrence Erlbaum.
- Lantolf, J. P., Xi, J., & Minakova, V. (2021). Sociocultural theory and concept-based language instruction. *Language Teaching*, 54(3), 327-342.
- Lee, J.Y. (2015). Korean EFL learners' development of interlanguage pragmatics in speech act of request. *English Subject Education*, 14(2), 93-120.
- Lewis, T. (2014). Learner autonomy and the theory of sociality. In *Social dimensions of autonomy in language learning* (pp. 37-59). London, UK: Palgrave Macmillan.
- Lin, Y., & Wang, H. (2018). Using enhanced OER videos to facilitate English L2 learners' multicultural competence. *Computers & Education*, 125, 74-85. Retrieved from <https://doi.org/10.1016/j.compedu.2018.06.005>

- Lorenzo-Dus, N., & Bou-Franch, P. (2003). Gender and politeness: Spanish and British undergraduates' perceptions of appropriate requests. In J. Santaemilia (Ed.), (pp.187-199). Valencia, Spain: Univ. Valencia.
- Mackey, A., & Gass, S. M. (2015). *Second language research: Methodology and design*. New York, NY: Routledge.
- Malmir, A. (2020). The effect of interactionist vs. interventionist models of dynamic assessment on L2 learners' pragmatic comprehension accuracy and speed. *Issues in Language Teaching*, 9(1), 279-320.
- Malmir, A. (2020). Interlanguage pragmatic learning strategies (IPLS) as predictors of L2 social identity: A case of Iranian upper-intermediate and advanced EFL Learners. *Iranian Journal of Applied Language Studies*, 12(1), 177-216.
- Malmir, A., & Derakhshan, A. (2020). The socio-pragmatic, lexico-grammatical, and cognitive strategies in L2 pragmatic comprehension: The case of Iranian male vs. female EFL learners. *Iranian Journal of Language Teaching Research*, 8(1), 1-23.
- Malmir, A., & Mazloom, P. (2021). The impact of group dynamic assessment (GDA) vs. computerised dynamic assessment (C-DA) on Iranian EFL learners' pragmatic comprehension. *Journal of Applied Linguistics and Applied Literature: Dynamics and Advances*, 9(1), 67-94.
- Maraver, M. J., Lapa, A., Garcia-Marques, L., Carneiro, P., & Raposo, A. (2022). Can we learn from errors? Retrieval facilitates the correction of false memories for pragmatic inferences. *Plos one*, 17(8), 1-21.
- Murray, G. (2014). Exploring the social dimensions of autonomy in language learning. *Social dimensions of autonomy in language learning* (pp. 3-11). London, UK: Palgrave Macmillan.
- Nguyen, M. T. T. (2011). Learning to communicate in a globalized world: To what extent do school textbooks facilitate the development of intercultural pragmatic competence? *RELC Journal*, 42(1), 17-30.
- Oxford, R. (1989). Use of language learning strategies: A synthesis of studies with implications for strategy training. *System*, 17, 235-247.
- Oxford, R. (2011). *Teaching and researching language learning strategies*. Harlow, UK: Person Education
- Pham, L. L. N., Nguyen, H. T., & Le, V. T. K. (2021). Triggering students' learning autonomy using the combination of m-learning and gamification: a case

- study at Nguyen Tat Thanh University. *Teaching English with Technology*, 21(2), 66-91.
- Poehner, M. E. (2008). *Dynamic assessment: A Vygotskian approach to understanding and promoting L2 development*. Pennsylvania: Springer.
- Poole, F. J., & Clarke-Midura, J. (2020). A systematic review of digital games in second language learning studies. *International Journal of Game-Based Learning (IJGBL)*, 10(3), 1-15.
- Rassaei, E. (2021). Implementing mobile-mediated dynamic assessment for teaching request forms to EFL learners. *Computer Assisted Language Learning*, 1-31. Retrieved from <https://doi.org/10.1080/09588221.2021.1912105>
- Redmer, G. (2022). Self-regulation in an advanced language learner: A case study of language learning strategies. *Studies in Self-Access Learning Journal*, 13(1), 60-76.
- Regional English Language Office for the Andean Region. (2012). English through state's new computer game. Retrieved from: <http://reloandes.com/2012/06/24/english-through-states-new-computer-game/>
- Reinhardt, J., & Thorne, S. L. (2020). Digital games as language-learning environments. *Handbook of game-based learning*, (pp.409-435). Massachusetts: MIT Press.
- Rezaee, A. A., Alavi, S. M., & Razzaghifard, P. (2019). The impact of mobile-based dynamic assessment on improving EFL oral accuracy. *Education and Information Technologies*, 24(5), 3091-3105.
- Riazi, A. M. (2016). *The Routledge encyclopedia of research methods in applied linguistics*. New York, NY: Routledge.
- Ritonga, M., Farhangi, F., Ajanil, B., & Farid Khafaga, A. (2022). Interventionist vs. interactionist models of dynamic assessment (DA) in the EFL classroom: impacts on speaking accuracy and fluency (SAF), foreign language classroom anxiety (FLCA), and foreign language learning motivation (FLLM). *Language Testing in Asia*, 12(1), 1-21.
- Rogers, S. (2014, October). Program theory logic model of Trace Effects video game. In *E-Learn: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education* (pp. 1672-1684). Association for the Advancement of Computing in Education (AACE). Retrieved from <https://www.learntechlib.org/primary/d/148998>



- Shakki, F., Naeini, J., Mazandarani, O., & Derakhshan, A. (2020). Instructed second language English pragmatics in the Iranian context. *Journal of Teaching Language Skills*, 39 (1), 201-252.
- Shakouri, A., Malmir, A., & Esfandiari, R. (2022). Cultivating L2 pragmatic comprehension through computerized vs. non-computerized instruction, multiuser virtual environments (MUVES) and mobile augmented reality games (MARGs). *Issues in Language Teaching*, 11(1), 313-358.
- Shirazi, M., Ahmadi, S. D., & Mehrdad, A. G. (2016). The effect of using video games on EFL learners' acquisition of speech acts of apology and request. *Theory and Practice in Language Studies*, 6(5), 1019-1026.
- Soyoof, A., Reynolds, B. L., Vazquez-Calvo, B., & McLay, K. (2021). Informal digital learning of English (IDLE): A scoping review of what has been done and a look towards what is to come. *Computer Assisted Language Learning*, 1-27. Retrieved from <https://doi.org/10.1080/09588221.2021.1936562>
- Sykes, J. (2013). Multiuser virtual environments: Learner apologies in Spanish. In N. Taguchi & J. Sykes (Eds.), *Technology and interlanguage pragmatics research and teaching* (pp. 71–100). Amsterdam, Netherlands: John Benjamins.
- Sykes, J. M. (2017). Technologies for teaching and learning intercultural competence and interlanguage pragmatics. *The handbook of technology and second language teaching and learning* (pp. 118-133). New Jersey, NJ: Wiley Online Library.
- Sykes, J. M. (2018). Interlanguage pragmatics, curricular innovation, and digital technologies. *calico journal*, 35(2), 120-141.
- Taguchi, N. (2006). Analysis of appropriateness in a speech act of request in L2 English. *Pragmatics*, 16(4), 513-533.
- Taguchi, N. (2010). Longitudinal studies in interlanguage pragmatics. *Pragmatics across languages and cultures*, (pp. 333-361). Berlin: De Gruyter Mouton.
- Taguchi, N. (2017). Interlanguage pragmatics. In A. Barron, P. Grundy, & G. Yueguo (Eds.), *The Routledge handbook of pragmatics* (pp. 153-167). New York, NY: Routledge.
- Taguchi, N. (2018). Pragmatic competence in foreign language education: Cultivating learner autonomy and strategic learning of pragmatics. *New perspectives on the development of communicative and related competence*

- in foreign language education*, 53-69. Retrived from <https://doi.org/10.1515/9781501505034>
- Taguchi, N. (2020). Digitally mediated remote learning of pragmatics. *Foreign Language Annals*, 53(2), 353-358.
- Taguchi, N., & Li, S. (2020). Contrastive pragmatics and second language (L2) pragmatics: Approaches to assessing L2 speech act production. *Contrastive Pragmatics*, 2(1), 1-23.
- Taguchi, N., Li, S., & Liu, Y. (2013). Comprehension of conversational implicature in L2 Chinese. *Pragmatics and Cognition*, 21(1), 139-157.
- Taguchi, N., Tang, X., & Maac, J. (2019). Learning how to learn pragmatics: Application of self-directed strategies to pragmatics learning in L2 Chinese and Japanese. *East Asian Pragmatics*, 4(1), 11-36.
- Tajeddin, Z., & Bagherkazemi, M. (2021). Implicit and explicit pragmatic learning strategies: Their factorial structure and relationship with speech act knowledge. *TESL-EJ*, 25(3), 1-28.
- Tajeddin, Z., & Malmir, A. (2015). The construct of interlanguage pragmatic learning strategies: Investigating preferences of high vs. low pragmatic performers. *Journal of Teaching Language Skills*, 33(4), 153-180.
- Tajeddin, Z., & Malmir, A. (2023). *Learners' use of pragmatic learning strategies (PLS) across language learning experiences and genders: An investigation based on Rebecca Oxford's six-component model of learning strategies*. [Unpublished manuscript].
- Tang, X., & Taguchi, N. (2020). Designing and using a scenario-based digital game to teach Chinese formulaic expressions. *Calico Journal*, 37(1). Retrieved from <https://doi.org/10.1558/cj.38574>
- Tang, X., & Taguchi, N. (2021). Digital game based learning of formulaic expressions in second language Chinese. *The Modern Language Journal*, 105(3), 740-759.
- United States Department of State. (2012). *Trace effects* [Video game]. Retrieved from <http://americanenglish.state.gov/trace-effects>
- VanPatten, B., Keating, G. D., & Wulff, S. (2020). *Theories in second language acquisition: An introduction* (3rd ed.). New York, NY: Routledge.
- Vidergor, H. E. (2021). Effects of digital escape room on gameful experience, collaboration, and motivation of elementary school students. *Computers &*

- Education*, 166, Retrieved from <https://doi.org/10.1016/j.compedu.2021.104156>.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Vygotsky, L. S. (1987). The collected works of L. S. Vygotsky. Volume 1, Problems of general psychology, Including the volume thinking and speech. In R. W. Rieber & A. S. Carton (Eds). New York, NY: Plenum.
- Vygotsky, L. S. (1998). The collected works of L. S. Vygotsky. Volume 5, Child psychology. In R. W. Rieber (Ed.). New York, NY: Plenum.
- Wang, H. (2020). Facilitating English L2 learners' intercultural competence and learning of English in a Taiwanese university. *Language Teaching Research*, 27(4), 1-17. Retrieved from <https://doi.org/10.1177/1362168820969359>
- Wichadee, S., & Pattanapichet, F. (2018). Enhancement of performance and motivation through application of digital games in an English language class. *Teaching English with Technology*, 18(1), 77-92.
- Wiggins, B. E. (2016). An overview and study on the use of games, simulations, and gamification in higher education. *International Journal of Game-Based Learning*, 6(1), 18-29.
- Xu, Z., Chen, Z., Eutsler, L., Geng, Z., & Kogut, A. (2020). A scoping review of digital game-based technology on English language learning. *Educational Technology Research and Development*, 68(3), 877-904.

## Appendices

### Appendix A: Sample L2 request production tasks

#### Low situation

You are about to start your car when you notice that its battery has gone flat. You need to go to school now and you do not have any other means but to ask your neighbor, Sara, whom you know well, to give you a ride to school. You see your neighbor go out by car and you decide to ask her to drive you to school.

Sara: Hi.

You: Hi, Sara. My car battery has just gone flat and does not work, so I can't start it. I really need to get to school and I am in a hurry.

.....

Sara: Sure. Get in.

High situation

You are talking with your English professor in the office. There is going to be a test next Saturday, but you are invited to one of your friend's wedding on the same day. You want to ask her/him to change the date of the test for you.

### Appendix B: The PLS questionnaire (adopted/ adapted from Tajeddin & Malmir, 2015)

1	I highlight/underline different speech acts and their words and grammar in related books.	SA A NI D SD
2	I take notes about the form of speech acts, their meaning, or their use.	SA A NI D SD
3	I relate already prior knowledge about speech acts to new acquired pragmatic information.	SA A NI D SD
4	I remember speech acts by making a mental realization of the situations in which they are used.	SA A NI D SD
5	I review the pre-written speech acts and sentences and other information for different communication situations.	SA A NI D SD
6	I use different realizations of a speech act and write them in short conversations to be remembered easily.	SA A NI D SD
7	I use flashcards for memorizing speech acts and their linguistic forms.	SA A NI D SD

8	I remember speech act patterns by their vocal repetition.	SA A NI D SD
9	I notice how natives and non-natives use speech acts.	SA A NI D SD
10	I notice that speakers' age and gender may impact speech act and learn about these aspects.	SA A NI D SD
11	I notice the conversational patterns, routines, and collocations by natives to express speech acts.	SA A NI D SD
12	I notice natives' nonverbal behavior in the use of speech acts in conversations via English movies and TV programs.	SA A NI D SD
13	I notice how speakers' power relations, employment positions, and social ranks impact the use of speech acts.	SA A NI D SD
14	I pay attention to the formality degrees and grammatical structures while speech acts according to sociocultural and contextual factors.	SA A NI D SD
15	I notice the tone of natives' voices while using speech acts.	SA A NI D SD
16	I notice and try to learn the linguistic and politeness means used by natives while using speech acts.	SA A NI D SD
17	I try to understand speakers' intentions via words, grammatical structures, and contextual factors when I listen to or study English conversations.	SA A NI D SD
18	I try to learn speech acts implicitly using instructional materials.	SA A NI D SD
19	I try to learn most important speech acts.	SA A NI D SD
20	I practice using speech acts lonely or with my classmates through role plays.	SA A NI D SD
21	I try to use speech acts in conversations with more competence English speakers.	SA A NI D SD
22	I notice and try to learn the turn-taking patterns for speech acts in interactions.	SA A NI D SD

23	I browse the websites to find instructional materials about speech acts.	SA A NI D SD
24	I ask natives or more competent classmates for information about speech acts.	SA A NI D SD
25	I notice and take notes on sociocultural affinities and dissimilarities between L1 and L2 speech acts.	SA A NI D SD
26	I practice my speech acts and communication strategies with other people.	SA A NI D SD
27	I learn English speech acts directly through teaching.	SA A NI D SD
28	I think that power relations may slightly impact grammatical or lexical realization of speech acts.	SA A NI D SD
29	I consider that learning or practicing social factors are not required as that may be learned step-by-step.	SA A NI D SD
30	I think that sociocultural dissimilarities may not change speech acts' form and content.	SA A NI D SD
31	I think that speech acts' form and function are universal and grammar and vocabulary are of prime importance not sociocultural factors.	SA A NI D SD
32	I can notice my mistakes in the proper use of speech acts.	SA A NI D SD
33	I seek time to learn and use speech acts as much as I can.	SA A NI D SD
34	I notice my knowledge gaps in terms of pragmatic items and speech acts.	SA A NI D SD
35	I try to know how to acquire and use speech acts and pragmatic features better.	SA A NI D SD
36	I organize learning of English speech acts.	SA A NI D SD
37	I evaluate my learning of speech acts and pragmatic knowledge.	SA A NI D SD
38	I try to anticipate speech acts or their uses before conversing in English.	SA A NI D SD

39	I audio/videotape my English conversations to observe my strengths and weaknesses regarding the used speech acts.	SA A NI D SD
40	I think I have no certain goal for enhancing my knowledge of speech acts.	SA A NI D SD
41	I follow politeness techniques while using speech acts with natives or non-natives.	SA A NI D SD
42	I pay attention to the interlocutors' gender and social position and try to use the most appropriate form of speech acts.	SA A NI D SD
43	I use appropriate speech acts via face-to-face conversations, phone conversations, etc.	SA A NI D SD
44	I discuss with more knowledgeable learners and try to use different speech acts.	SA A NI D SD
45	I try to learn the sociocultural aspect of English speech acts.	SA A NI D SD
46	I practice using speech acts with other L2 learners.	SA A NI D SD
47	I like to get feedback from competent L2 speakers on how to use proper speech acts.	SA A NI D SD
48	I regard the different cultural impressions of proper behavior in L2 conversations.	SA A NI D SD
49	I ask others' help for using speech acts when failing to do so in conversations with natives or non-natives.	SA A NI D SD
50	I use simple language when I cannot express myself using the speech acts.	SA A NI D SD
51	I resort to Persian translation when I am not sure how to use a certain speech act.	SA A NI D SD
52	I use different references such as books, dictionaries, software, websites, and natives when I cannot use appropriate speech acts.	SA A NI D SD
53	I ask my teacher how to use appropriate and polite speech acts.	SA A NI D SD

54	I seek help from others in the conversation, when I do not understand how to use appropriate speech acts.	SA A NI D SD
55	I seek help from native speakers when I cannot understand how to use appropriate and polite speech acts.	SA A NI D SD
56	I escape talking when I cannot use appropriate speech acts.	SA A NI D SD
57	I prefer to modify my intention when I cannot use the appropriate speech act.	SA A NI D SD
58	I feel capable of learning English pragmatic features and speech acts.	SA A NI D SD
59	I have the motivation to learn or to communicate in English despite pragmatic failures.	SA A NI D SD
60	I try to keep calm in case of pragmatic failures.	SA A NI D SD
61	I try to use specific speech acts even when I know I may make a mistake.	SA A NI D SD
62	I know how I may get embarrassed when misusing or misunderstanding speech acts.	SA A NI D SD
63	I enjoy it when I succeed in using speech acts.	SA A NI D SD
64	I feel shy when making pragmatic mistakes.	SA A NI D SD
65	I worry about misunderstandings in conversations with natives or nonnatives.	SA A NI D SD
66	I lose motivation to learn speech acts in case of pragmatic failure.	SA A NI D SD
67	I think I am not capable enough to learn English speech acts.	SA A NI D SD
68	I feel uncertain about using the known speech acts.	SA A NI D SD