Out-of-Classroom Video Gameplay and Its Impact on L2 Motivation and Ideal L2 Self: Evidence from Saudi EFL Learners

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Abstract

While the potential of video games as a tool for teaching languages has gained some recognition, how gameplay outside the classroom affects EFL learners' motivation and ideal L2 self remains underexplored, particularly in EFL contexts. This mixed-methods study examined the perceptions of 216 Saudi undergraduate EFL learners who regularly engage in video gameplay outside the classroom. Furthermore, the study explored potential differences in these perceptions based on gender and study major. A questionnaire with closed- and open-ended items was used to capture both quantitative and qualitative insights. The quantitative results indicated that active engagement in video gameplay was positively associated with EFL learners' motivation by providing an exciting experience, enhancing engagement, and fostering self-autonomy. Furthermore, results revealed that video gameplay engagement positively related to learners' ideal L2 self-concept, motivating continuous improvement, boosting confidence, and envisioning proficiency in English. Thematic analysis of the qualitative data further illustrated learners' positive perceptions of video gameplay for L2 learning. The emerging themes provided valuable insights into the experiences and perceptions of the learners. Interestingly, the results of this study indicated that neither gender nor academic major had a significant influence on learners' perceptions. This research adds to the evidence on the role of digital gaming in learning a second language and emphasizes the importance of learning opportunities outside the classroom in maintaining L2 motivation and the development of learners' L2 identities. Suggestions for teaching and implications for future research are provided.

Keywords: Video games, out-of-class learning, L2 motivation, ideal L2 self, EFL learners

1. Introduction

The rapid proliferation of digital technologies has significantly transformed how individuals approach second language (L2) learning. As noted by Dörnyei and Ushioda (2011), one of the strengths of technology-augmented language learning methods is that they motivate and empower L2 learners to intermittently, if not thoroughly, immerse themselves in learning the language and using it in authentic contexts. Recent studies back this up, showing that technology can give L2 motivation a real boost (Adolphs et al., 2018; Zhang & Zou, 2022). Within this broader shift, video games have drawn growing attention as learning resources (Reinders & Wattana, 2015; Reinhardt & Sykes, 2014; Reinhardt & Thorne, 2020). With gaming now part of many students' daily lives, digital game-based learning (DGBL) has moved into mainstream practice, and recent evidence shows it can lift enjoyment and motivational outcomes in EFL settings (Zhou, 2024). A wide range of studies also link DGBL to reduced anxiety (Horowitz, 2019) and higher engagement and motivation (Shadiev & Yang, 2020; Zhang & Zou, 2022). Beyond classroom applications, researchers have examined language learning—both intentional and incidental—in commercial "vernacular" games (Arnseth, 2006) and tested a variety of online formats, from social virtual spaces to massively multiplayer online role-playing games (e.g., Wang & Tahir, 2020).

Video games can create interactive learning experiences that replicate real-life situations where learners assume functional roles and perform tasks with given information (Reinhardt & Sykes, 2014). Studies show that this kind of gameplay gives learners chances to practice communicative skills (Horowitz, 2019; Reinders & Wattana, 2015) and can support vocabulary growth and reading development (Gao & Pan, 2023). Because the tasks feel authentic and the environment is dynamic, learners tend to stay engaged and experience language use that resembles real-world communication (Li, Peterson & Wan, 2022; Reinhardt & Thorne, 2020). Building on this, work in the L2 Motivational Self System suggests that game-mediated settings also shape how learners imagine and regulate their future L2 selves, with DGBL associated with gains in enjoyment and self-related motivation (Zhou, 2024).

Research has also confirmed the advantages of DGBL through participants' positive perceptions (Bawa, 2019; Li, Peterson & Wan, 2022; Taskiran, 2019). However, the existing literature suggests that these positive perceptions may vary based on individual differences among participants, including age, gender, academic major, and duration of game-playing experience (Bolliger, Mills, White & Kohyama, 2015). Beyond demographic factors, recent open-access research shows that motivational dynamics connect to broader affective and cognitive variables—such as communication anxiety, language mindset, and willingness to communicate (WTC)—within the L2MSS framework (Fan & Wang, 2025). The research on the influence of gender on participants' perceptions of DGBL remains inconclusive, with some

studies reporting significant differences (e.g., Pia & Wikstrom, 2015) while others finding no notable variations (Umamah & Saukah, 2022). Given these mixed findings, further research is needed to better understand the complex interplay between individual learner characteristics and the effectiveness of engagement in video gameplay in enhancing L2 participants' language learning experience.

Research on video gameplay and language learning has predominantly been conducted within formal educational contexts, such as classrooms or course-related assignments, with a noticeable scarcity of studies that attempt to combine out-of-school gaming experiences with formal language learning outcomes, despite the large number of game users (Benson & Reinders, 2011; Pia & Wikstrom, 2015). As learners' self-directed learning can be quite different from formal instruction, there have been calls for more research on student-centered out-of-class online learning (Shadiev & Yang, 2020). Moreover, recent theorizing in L2 motivation highlights the need to account not only for learners' ideal L2 self but also for their actual L2 self as it evolves in context (Hu, Zhang & Hennebry-Leung, 2025). This perspective is highly pertinent to game-mediated learning beyond the classroom, where ongoing, self-directed engagement may reshape both present self-beliefs and future self-images. Furthermore, previous studies have predominantly focused on school participants (e.g., Cruaud, 2018; Pia & Wikstrom, 2015), with other groups of L2 learners, including EFL undergraduates, being underrepresented in the existing literature. Additionally, while numerous studies have investigated the impact of video gameplay on participants' language skills, there is a dearth of research specifically focusing on the perceptions of EFL participants regarding the effectiveness of video gameplay in out-of-class environments for language learning motivation and the development of the ideal L2 self, particularly in Arabic-speaking contexts. To fill these research gaps, this study aims to explore the perceptions of actively engaged EFL undergraduates in out-of-classroom video gameplay, examining the connection between their investment in video gameplay and motivation to learn various language aspects, as well as the formation of their ideal L2 self.

Exploring the perceptions of EFL learners on how active participation in video games affects their motivation draws a picture of the pros and cons of using video games in the process of learning a language. Knowing this helps teachers and curriculum planners designing instructional materials which can be more effective and instructional strategies more engaging. Moreover, the influence of video gameplay on learners' perceptions of their L2 competencies and language learning goals and outcomes offers valuable insights for the construction of positive L2 identities and the promotion of learner autonomy. This is important for the development of educational practices grounded on the results of the study and aimed at improving learners' self-perception, self-efficacy, and self-regulation in language learning.

2. Literature Review

2.1 2Video Games and L2 learning

Video games now outpace many other media in content, complexity, and appeal, and over the past three decades their value for areas like education and healthcare has become increasingly clear (Li, Peterson & Wan, 2022). Within this shift, digital game-based learning (DGBL)—advanced by James Paul Gee and Marc Prensky—highlights how games can reshape learning by tapping into the interests and enthusiasm of younger generations (Gee, 2007; Prensky, 2001). As Prensky (2001) argues, games offer learners pleasure, deep engagement, structure, incentives, knowledge building, excitement, imaginative expression, social connection, and rich emotional experiences.

To frame research and practice in game-mediated second language learning and pedagogy (L2LP), Reinhardt and Sykes (2012) classified the works related to this matter. They identified three fundamental dimensions within the topic: 'game-enhanced', 'game-based', and 'game-informed'. Game-enhanced studies are those which examine how vernacular (non-learning purpose) commercial games can offer L2 learning opportunities and how those might be utilized in formal pedagogy. Game-based approaches focus on the utilization of L2 learning video games in instruction, while game-informed approaches draw on the study of games and play to directly teach and learn outside dedicated game environments and educational pedagogy, which relates to the 'gamification' (Kapp, 2012) and 'gamefulness' (McGonigal, 2013) concepts. These distinctions culminate in four overarching perspectives which serve as the guiding questions for the research and practice of the study. These are the four perspectives that the authors point out are relevant. They suggest that the research of all four perspectives is necessary as every perspective informs the other three. They discussed the intertwining of game-enhanced and game-based L2LP research, describing how studying vernacular games can offer valuable insights for designing game-based learning environments. They also argue that while there are several justified uses for incorporating vernacular games into L2 classrooms, the goal should not be only game-based pedagogy.

Using commercial off-the-shelf (COTS) games for educational purposes has several potential advantages, as noted by Gee (2007). These include usefulness and the creation of learning communities (Li, Peterson & Wan, 2022; Reinhardt & Thorne, 2020), possibilities for intercultural learning, and the promotion of socio-cognitive mechanisms of learning and language acquisition (e.g., Piiranen-Marsh & Tainio, 2009; Zheng, Young, Wagner & Brewer, 2009). At its core, game-enhanced rests on the assumption that understanding the use of commercial video games outside the classroom and how these games can be incorporated into classroom teaching will improve the teaching of learning and transform second language acquisition (L2) learning.

Research on video gameplay and English language acquisition highlights its potential benefits. In a study conducted by Pia and Wikstrom (2015), the relationship between out-of-school video gameplay and in-school L2 English vocabulary measures and grading outcomes was examined. The results indicated significant correlations between gameplay, vocabulary tests, and English grades specifically for boys. Cruaud (2018) found that the use of a gamified application in a French-as-a-foreign-language class led to increased student engagement,

playfulness, and autonomy. Ho (2020) observed positive effects on Chinese university participants' English learning when combining video games with active learning strategies, enhancing behavioral, cognitive, and motivational engagement. Li, Peterson and Wan's (2022) mixed-methods case study found that six participants who engaged in in-class instructed gameplay and post-class game-related activities demonstrated improved vocabulary, writing, and listening skills. Additionally, the participants reported positive perceptions and satisfaction with the game-based language learning approach. Recent empirical work further indicates that DGBL can enhance enjoyment and motivational outcomes in EFL contexts (Zhou, 2024), reinforcing earlier claims while providing up-to-date support for affective-motivational benefits.

2.2 L2 Motivation and Ideal L2-self

Learning a second language (L2) in classroom setting can be difficult because students have various academic and personal commitments. This is especially true in a university context, where students must think about how to allocate limited time and consider the opportunity cost of studying an L2 (Nagle, 2021). On the other hand, recent technological developments have changed L2 learners' and users' approaches to learning the language through fully customizable and personalized offerings that can be used any time and any place. Such technological advances underline the need to nurture more autonomous L2 learners and encourage L2 learning in contexts outside the classroom. This freedom allows learners to seek acquisition and keep motivation on L2 for longer (Ueki & Takeuchi, 2013; Nagle, 2021).

Understanding the importance of motivation helped by self-related constructs such as the ideal L2 self, is key to promoting learner autonomy (Dörnyei & Ushioda, 2011). Continuous motivation is an essential predicate to successfully L2 learning (Dörnyei, Kubanyiova, 2014). One of the ways to nurture such motivation is by mentally picturing and contemplating our ideal L2 self. In context of current L2 learning environment, there is an increasing need for a more appropriate constructed L2 motivation, to capture its dynamic and contextual nature, as proposed by Dörnyei (2009), to satisfy the demand of today's globalized world.

In response to the need for reconceptualization, Dörnyei (2009) introduced the L2 Motivational Self System (L2MSS) as a framework for understanding motivation in L2 learners. Dörnyei proposes that learners are driven to learn the L2 when they have a clear 'ideal L2 self' image to aspire to, and they wish to close the gap between their current self and their ideal L2 self. L2MSS has three components. The ideal L2 self focuses on learners' aspirations and goals, the ought-to L2 self refers to the obligations placed on learners to learn the L2, and the L2 learning experience refers to the components of the learning environment. Dörnyei and Ushioda (2011) tracked L2 motivation over time and found a consistent decline motivated L2 learners and cited earlier studies as evidence. While learners seem to lack the motivation to continue, studies that use identity-related measures have shown oblong motivational shifts, particularly in relation to the Ideal L2 self and Current L2 self framework. Dörnyei (2019) suggests that the L2MSS has established self-based perspectives and motivational frameworks, but the field still needs to expand and understand the L2 learning experience.

Studies focusing on L2MSS have pointed out how important the ideal L2 self and the L2 learning experience are regarding one's effort and other motivated behaviors (Adolphs et al., 2018). Existing literature shows that the L2 learning experience may outweigh self-concepts in multiple contexts in shaping intended effort (Dörnyei, 2019). Discouraging learning experiences can cause shifts in students' motivation, leading them to disengage from the L2 learning pathway, explore other L2 study options, or abandon language learning altogether. This reveals the need for participants to have a fulfilling and motivating L2 learning experience and, in conjunction with that, the importance of scaffolding the ideal L2 self. The most recent theoretical contributions propose the addition of learners' actual L2 self—how learners see and feel about their L2 abilities and identities and their current realities—into the L2MSS, that will aid in elucidating person-in-context dynamics (Hu, Zhang & Hennebry-Leung, 2025). This addition has particular pertinence for out-of-class digital activities, where ongoing experiences (e.g., gameplay) can influence current self-beliefs and self-images.

Past research regarding the examination of motivation in relation to technology and L2 learning has used two perspectives. One perspective is the learners' motivation to use technology to learn certain skills or components in certain contexts. The other perspective is learners' overall motivational attitudes towards technology-enhanced language learning. Put simply, these perspectives are referred to as state-like task motivation and global motivation. Zeng and Fisher (2023) made a distinction between the two and referred to the first as "activity motivation" and the second as "global motivation." The authors noted that, while technology-enabled activities are motivation boosters, the reasons for technology fostering global motivation are not understood. This explains the lack of sufficient and cohesive understanding of the motivational impact of digitally mediated interactions in L2 learning. Supporting this perspective, other studies identified the key affective-cognitive variables of communication anxiety, growth language mindset, and willingness to communicate (WTC) that are associated with the L2MSS dimensions (Fan & Wang, 2025). This suggests other routes in which technology-mediated activities, like video games, might affect behavior motivation in learners.

Acknowledging the established importance of video games in language education and the role of motivation and L2 self, the present study aims to build upon the limitations and recommendations of previous research. By tapping into the fields of second language acquisition and computer-assisted language learning (CALL), this study seeks to shed light on the relation between engagement in video gameplay activity in out-of-classroom settings and L2 learning motivation and ideal L2 self. Specifically, the main objective is to investigate the perceptions of actively engaged EFL undergraduates regarding the relationship between engagement in playing video gameplay and their L2 motivation and Ideal L2 self. Additionally, the study aims to explore potential differences in these perceptions based on gender and study major. In addition, it seeks to examine whether these perceptions vary according to participants' gender and academic major. The following three research questions guided this inquiry:

1) How do EFL undergraduate participants perceive the relationship between their engagement in video gameplay in out-of-classroom settings and their L2 learning motivation?

2) To what extent do EFL undergraduate participants perceive a connection between their engagement in video gameplay in out-of-classroom settings and their ideal L2 self-concept?

3) Are there any variations in the perceptions of the relationship between engagement in video gameplay, L2 learning motivation, and ideal L2 self among EFL undergraduate participants based on gender and study major?

3. Method

3.1 Research Design

This study used a cross sectional mixed methods research design to investigate the relationship between engagement in video gameplay in out-of-classroom settings and L2 learning motivation and ideal L2 self. Data was collected through a self-report structured questionnaire, which included a combination of closed-ended and open-ended questions designed to capture participants' perceptions of their gaming practices and language learning experiences.

The use of self-report measures was considered appropriate given the study's focus on learners' subjective perceptions, motivational orientations, and self-concepts, which are not directly observable. The inclusion of open-ended questions enabled the collection of qualitative data, providing deeper insights into participants' lived experiences and personal reflections. By adopting this mixed-methods approach, the study aimed to generate a more comprehensive understanding of the phenomenon by integrating quantitative trends with qualitative depth.

3.2 Participant

Based on convenience sampling technique, 216 EFL undergraduates (85 male, 131 female) from four public universities in Saudi Arabia participated in the study. Their age ranged between 18 and 23 (m= 21.18& SD= 1.679). They were from different academic majors and their language proficiency levels ranged between pre-intermediate and intermediate (See table 1). All participants reported being actively engaged in video gameplay outside the classroom, with most indicating that they played either daily or several times per week, and a smaller proportion reporting gameplay at least once a week. A large majority of participants (81.3%) reported engaging in multiple types of video games, suggesting diverse gaming practices within the sample. These included action/adventure games, puzzle games, strategy games, and simulation games, which typically involve varying levels of linguistic input, narrative engagement, and problem-solving demands. Although the study did not experimentally manipulate game type or difficulty, this contextual information provides insight into the gaming environments in which participants' language exposure occurred.

Table 1. Participants' Demographic profile

Demographic info variables		Frequency	Percentage (%)
Gender	Male	85	39.35
	Female	131	60.65
Major	English language	89	41.20
	Economic & Business administration	33	15.28
	Medicine	24	11.11
	Computer sciences	22	10.19
	Social sciences	21	9.72
	Natural Sciences	12	5.56
	Engineering	15	6.94
Engagement in Playing	Everyday	90	41.66
	Several times a week	98	45.37
	once a week	28	12.97

3.3 Research Instrument

The questionnaire consisted of three main sections. The first section gathered demographic information, including age, gender, academic major, frequency of video gameplay, and types of video games played. The second section included 18 items measuring participants' perceptions regarding the influence of engaging in video gameplay on their L2 motivation (13 items) and ideal L2 self (5 items). These items were rated on a 5-point Likert scale of agreement. The final section included an open-ended question that allowed participants to share personal experiences or reflections regarding the role of active engagement in video gameplay in shaping their motivation for learning English and their perception of their ideal English-speaking self. The overall questionnaire demonstrated a high reliability, with Cronbach's alpha coefficient of 0.88. The final section featured an open-ended question that provided participants with the opportunity to share personal experiences or reflections regarding the role of video games in shaping their motivation for learning English and their ideal English-speaking self.

3.4 Data Collection Procedures

Following a pilot study to refine the instrument, the final questionnaire was administered using Google Forms. The survey link was distributed to participants via WhatsApp. Participants were given a 14-day period to complete the questionnaire, during which a reminder message was sent to enhance the response rate. This online data-collection approach enabled efficient access to participants across

geographically dispersed public universities in Saudi Arabia.

3.5 Data Analysis

For the first two research questions, the data collected from the questionnaire was analyzed quantitatively using SPSS. The descriptive statistics, which included the mean, standard deviation, and percentages, provided general summaries concerning the data with respect to participants' perceptions. For the third research question, inferential statistics focused on whether or not any meaningful differences or relationships existed among participants on the bases of gender and academic major.

Qualitative data obtained from the open-ended questionnaire responses were analyzed using thematic analysis, following a systematic, multi-stage procedure. First, all responses were read repeatedly to achieve data familiarization. Next, initial codes were generated inductively, with meaningful units of text identified in relation to participants' reported experiences of motivation, self-perception, language use, and engagement in video gameplay. NVivo software was used to support the organization, coding, and retrieval of qualitative data throughout this process.

The coded data were then reviewed and clustered into broader categories, from which salient themes were developed through an iterative process of comparison and refinement. These themes represented recurring patterns across participants' responses, including "Inspiring Confidence and Accent" and "Immersion and Language Practice." To enhance the credibility and reliability of the qualitative analysis, both researchers independently coded the data. The identified codes and themes were then compared and discussed, and a high level of agreement was achieved regarding theme identification and interpretation. Any minor discrepancies were resolved through discussion until consensus was reached.

4. Results

4.1 Quantitative Results

4.1.1 Perceptions of the Relationship between Engagement in Video Gameplay and L2 Learning Motivation (RQ1)

Based on quantitative analysis, the participants expressed interesting views for understanding the perceived correlation between playing videos games and the motivation to learn English. The results revealed an overall positive perception (mean = 4.19), indicating a relatively high level of agreement with the idea that video gameplay positively influences English language learning motivation. A standard deviation of 0.514 shows that participants had similar opinions, thus indicated some, but not large, diversity in the perception.

A close analysis of the results of each item in Table 2 revealed specific trends in participants' perceptions regarding the relationship between active engagement in video gameplay and their motivation to learn English. Most participants perceived video gameplay as an exciting experience for language learning (m = 4.53). Additionally, the data indicates that video gameplay serve as a great source of motivation for acquiring a broader vocabulary (m = 4.41) and improving language skills (m = 4.39), mainly enhancing their fluency (m = 4.39) and accuracy (m = 4.37) in spoken English. Furthermore, the results demonstrate that video gameplay motivates learners to practice listening comprehension (m = 4.33) and increases their willingness to communicate with native speakers (m = 4.15). Moreover, participants' responses highlight that engagement in video gameplay has a significant impact on language learning by fostering engagement and self-autonomy (m = 4.22). Additionally, participants perceived that video gameplay motivates them, to some extent, to read English materials and further develop their language proficiency (m = 3.71, SD = 1.201). Overall, the data suggests that active engagement in video gameplay has the potential to enhance participants' motivation levels and foster a positive attitude towards learning English as a second language (L2). However, it is important to note that the results indicate a relatively lower impact of video gameplay on motivating learners to improve their writing skills (m= 3.24).

Table 2. Perceived Impact of Video Gameplay on Motivation to Learn English

Items	Mean	SD
1. I find that learning English through video gameplay is an exciting experience.	4.53	.721
2. I enjoy listening to native English speakers interact while playing video games.	4.35	.897
3. video gameplay serves as a great source of motivation for improving my English language skills.	4.39	.732
4. Video gameplay motivates me to acquire more vocabulary in learning the English language.	4.41	.874
5. Video gameplay motivates me to practice listening to native speakers.	4.33	.900
6. Video gameplay increases my interest in writing skills.	3.24	1.233
7. Video gameplay increases my willingness to communicate with native speakers.	4.15	.887
8. Video gameplay improves my accuracy in spoken English.	4.37	.778
9. Video gameplay improve my fluency in spoken English.	4.39	.833
10. Video games are good tools for language learning.	4.40	.746
11. Video gameplay has a significant impact on my language learning, enhancing my engagement and self-autonomy.	4.22	.896
12. Video gameplay motivates me to read English materials, to further develop my language proficiency.	3.71	1.201
13. Video gameplay maximizes my language learning potential and effectiveness.	4.10	.876
Overall	4.19	0.514

4.1.2 Perceptions of the Relationship between Engagement in Video Gameplay and Ideal L2 Self-Concept (RQ2)

Analysis of participants' responses on the questionnaire items concerning the link between active involvement in video games and constructing their ideal second language (L2) self revealed a significantly positive impact (mean = 4.13, SD = 0.692). Respondents believe playing video games inspires them to enhance their English skills (m = 4.20) and strengthens their willingness to engage with English

learning opportunities (mean = 4.16). Furthermore, involvement in video games seems to strengthen learners' confidence in their capacity to become the English speaker they want to be, and in their control to eliminate the language barriers and communicate (mean = 4.16). Moreover, the data indicated that video games boost learners' confidence in achieving their ideal level of English language proficiency (Item 2: mean = 4.04) and help them envision themselves as highly proficient English speakers in the future (mean = 4.07) (see table 3).

Table 3. Perceived Impact of Video Gameplay on Shaping Ideal L2 Self

Items	Mean	SD
1. Video gameplay helps me envision myself as a highly proficient English speaker in the future.	4.07	.950
2.Video gameplay boosts my confidence in achieving my ideal level of English language proficiency.	4.10	.935
3.Video gameplay motivates me to pursue continuous improvement in my English language skills.	4.20	.848
4. Video gameplay enhances my belief that I can become the type of English speaker I aspire to be.	4.16	.948
5.Video gameplay increases my desire to actively engage with English language learning opportunities.	4.16	.953
Overall	4.13	0.692

4.1.3 Variations in Perceptions of the Relationship between Engagement in Video Gameplay, L2 Learning Motivation, and Ideal L2 Self based on Gender and Major (RQ3)

According to Table 4, no statistically significant difference was found in the mean scores for males and females regarding the relationship between actively engaging in video gameplay, motivation to learn English, and ideal L2 self (t-values were 0.557 and 1.736).

Table 4. Results of the Paired Sample t-Test for Differences in Perceptions between Males and Females

	Male		Female				
	M	SD	M	SD	t	df	Tabulated
L2 motivation	54.26	5.553	54.78	7.352	.557		
Ideal L2 self	21.20	3.341	20.37	3.515	1.736	214	1.96
Total	75.46	8.038	75.15	10.212	.239		

Regarding the differences based on participants' major, results reveal that participants majoring in medicine have the highest mean score of 57.13, followed closely by those in natural science (55.42), English language (mean = 54.87), and social sciences (54.13). While there are slight variations in mean scores across majors, the results of the one-way ANOVA presented in Table 5 indicated no statistically significant differences among the seven majors in the perceived relationship between engagement in video gameplay and either motivation for second language learning (F = 1.111) or ideal L2 self (F = 1.067). These findings suggest that engagement in video gameplay appears to have a similar influence on motivation and ideal L2 self across genders and different majors among the participants.

Table 5. One-way ANOVA by Major: Gameplay Engagement, L2 Motivation, Ideal L2 Self

L2 Motivation				Ideal L2 Self				
Source of variation	Sum of Squares	DF	Mean Squares	Sum of Squares	DF	Mean Squares	F	Sig.
Between Groups	297.651	6	49.609	76.702	6	12.784	1.111	
Within Groups	9333.164	209	44.656	2503.131	209	11.977		Not sig
Total	9630.815	215		2579.833	215		1.067	

4.2 Quantitative Results

The thematic analysis of the responses provided in the open-ended question resulted in four main themes that give meaningful perspective on the extent to which the participants' video game engagement has impacted their motivational shift towards learning English and their perception of their ideal L2 self. In what follows, each of these themes will be elaborated on with relevant supporting quotations.

A. Vocabulary Enrichment

Participants' responses identified vocabulary enrichment as one of the most prominent themes. They highlighted that engaging actively in video games contributed greatly to their vocabulary development in English. One participant stated, "I acquired all of my English vocabulary, and to this day, I continue to learn more in the English language through playing video games." Another participant mentioned, "Playing video games has unexpectedly expanded my vocabulary, and I continuously acquire new words and knowledge with each new game I play."

In addition, some participants explained which game types they found to most assist in developing their vocabulary, shedding light on which games help in vocabulary building. For instance, some participants noted that Action/Adventure games gave them access to a variety of English lexicon and expressions in immersive contexts. Others referred to Puzzle games, where English vocabulary was used meaningfully and language puzzles had to be solved. In addition, some respondents indicated that simulation and strategy games were helpful in acquiring domain-specific vocabulary related to particular themes or contexts within the game.

B. Motivational Influence on English Communication

Motivation, particularly in relation to the impact of video games, constitutes another key theme from the data analysis. The role of video games in increasing the participants' motivation to communicate in the English language was noted particularly in relation to English. As one student stated, "Video games have been an integral part of my life and have greatly motivated me to speak English." Another student

highlighted, "Playing video games makes me eager to communicate more, thereby enhancing my overall learning motivation." Moreover, the participants emphasized the motivational aspect of online video game play with native English speakers. One student specifically stated, "Engaging in online play with native speakers motivates me to improve my English language skills."

C. Inspiring Confidence and Accent

Participants noted the value of characters and storylines in video games as inspirational in building confidence and flexibility in their use of English. They pointed out the importance of grasping the dialogues as a key factor in building their self-esteem. One participant expressed, "Video game characters and stories have inspired me to develop greater confidence and adaptability when communicating in English." Another student remarked, "Comprehending the dialogue of the characters significantly boosts my confidence level." Furthermore, the participants mentioned actively attempting to emulate the accents of video game characters to enhance their own pronunciation. As one participant elaborated, "By listening to the characters' speech, I strive to mimic their accents, aiming to develop a similar accent."

D. Immersion and Language Practice

The analysis yielded one final theme related to the immersion environment that video games provide for practicing a language. The study participants reported that video games were initially motivating for them to learn English in order to connect with other people around the world and reach the fluency needed to fully enjoy games. One student described this by saying, "Video games sparked my English learning journey, motivating me to connect globally and master the language for immersive gaming experiences. This shaped my ideal English-speaking self as someone confident in diverse social contexts and adept at expressing complex ideas." Additionally, participants noted that playing video games that require communication and interaction in English provides a practical and immersive language practice environment. They acknowledged that many games have rich narratives and complex dialogues, which enhance their vocabulary, comprehension, and overall language skills. They also noted the benefits of developing their speaking, writing, and listening skills through engagement with native English speakers.

5. Discussion

Study results indicated that active engagement in video gameplay positively influences participants' motivation to learn English through the provision of an exciting experience, the improvement of their language skills, and the enhancement of their engagement and sense of self-autonomy. This finding is strongly supported by the high overall mean score for L2 motivation (M = 4.19) and particularly by items related to enjoyment, vocabulary acquisition, listening practice, and spoken fluency and accuracy. The study also revealed that engagement in video games contributed to learners' ideal L2 self-concept by motivating them to strive for continuous improvement, boosting their confidence, and helping them envision themselves as proficient English speakers. This is reflected in the consistently high mean scores across all ideal L2 self items (overall M = 4.13), indicating a robust perceived connection between gameplay and self-concept development. These findings are consistent with recent empirical evidence showing that game-mediated engagement enhances enjoyment and motivation in EFL settings (Zhou, 2024), as well as studies demonstrating that expectancy–value and flow mechanisms support collaboration, problem-solving, and sustained effort (Pan, Shao, & Shakibaei, 2021).

These findings align also with previous research (e.g., Bawa, 2019; Chapman & Rich, 2018; Enayat & Haghighatpasand, 2019; Li, Peterson & Wa, 2022; Umamah & Saukah, 2022) that emphasized the potential benefits of video gameplay in language learning, including increased enjoyment, engagement, and positive effects on various language learning aspects such as vocabulary acquisition, pronunciation, reading, and overall language proficiency. The relatively lower mean score reported for writing skills (M = 3.24), however, suggests that the motivational affordances of gameplay may be uneven across language skills, favoring receptive and oral skills more strongly than productive written skills. This pattern is consistent with the nature of many commercial video games, which typically emphasize listening, reading, and spoken interaction rather than extended writing tasks. Furthermore, prior studies have substantiated that the benefits of video games extend beyond the classroom, as out-of-school gameplay has been shown to contribute meaningfully to language exposure and learner engagement (Ho, 2020; Pia & Wikstrom, 2015; Rezai et al., 2024). Taken together with newer findings on enjoyment and motivation in digital game-based learning (Zhou, 2024) and on the motivational affordances of collaborative, problem-solving play (Pan, Shao & Shakibaei, 2025), the present results strengthen the view that active gameplay is positively associated with L2 motivation.

The thematic analysis of the qualitative data further confirmed the positive role of engagement in video gameplay in shaping motivation for language learning and the ideal L2 self. Themes such as vocabulary enrichment, motivation for communication, confidence building, and immersion closely mirror the quantitative trends, thereby lending credibility to the convergent mixed-methods findings. Participants frequently described how repeated exposure to authentic language input, narrative dialogue, and interaction with other players enhanced their confidence and self-efficacy. These qualitative insights provide explanatory depth to the statistical findings, illustrating how gameplay experiences translate into motivational and self-conceptual changes among Saudi EFL learners. In particular, learners reported imagining themselves as future competent English speakers, which reflects a strengthened ideal L2 self.

This aligns with research connecting technology-based experiences with changes in the actual and ideal second language (L2) self in the L2 Motivational Self System (L2MSS) (Hu, Zhang & Hennebry-Leung, 2025). There is also research that shows that anxiety, mindset, and willingness to communicate (WTC) work as the affective-cognitive channels through which motivation is further developed (Fan & Wang, 2025). The present findings suggest that video gameplay may indirectly shape these variables by offering low-anxiety, immersive,

and socially meaningful environments. Moreover, the motivational impact of video games appears to stem from several interrelated features of gaming environments, including immersion, interactivity, enjoyment, and opportunities for authentic communication, all of which have been identified as factors promoting technology acceptance when learners perceive digital engagement as aligned with their evolving L2 selves (Rahimi & Mosalli, 2024).

Interestingly, the results indicate that neither gender nor academic major significantly influenced participants' perceptions of the relationship between video gameplay, L2 motivation, and ideal L2 self. Despite minor variations in mean scores across majors, the absence of statistically significant differences suggests that the perceived motivational benefits of gameplay are relatively stable across demographic subgroups in this context. This finding contrasts with assumptions that individual differences may strongly shape technology perceptions (Bolliger, Mills, White, & Kohyama, 2015; Pia & Wikstrom, 2015), but it aligns with more recent studies suggesting that proximal affective-cognitive factors may overshadow demographic variables when learners evaluate technology-mediated experiences (Fan & Wang, 2025). It is also possible that shared exposure to global gaming cultures and online communities contributes to the homogenization of learners' motivational perceptions across gender and disciplinary boundaries (Ishida, Manalo & Sekiyama, 2024).

From a theoretical perspective, the positive influence of out-of-class video gameplay on motivation and the ideal L2 self can be interpreted through the lens of social constructivism. Social constructivist theory posits that learning is socially situated and constructed through interaction and meaningful activity (Vygotsky, 1978). Video games provide interactive, collaborative, and context-rich environments in which learners negotiate meaning, solve problems, and engage in authentic language use. The qualitative themes of immersion and communication observed in this study exemplify these principles, as learners reported practicing English in socially meaningful ways while pursuing in-game goals. Prior research has similarly emphasized the role of digital games in promoting authentic language exposure and interaction (Reinhardt & Sykes, 2014; Reinders & Wattana, 2015). The immersive and contextual nature of video games exposes learners to authentic language use, including vocabulary, grammar, and discourse patterns, which can enhance their language acquisition process as highlighted by previous studies (Hwang et al., 2016; Reinders & Wattana, 2015; Zheng, Young, Wagner & Brewer, 2009). Recent accounts further suggest that when learners experience digital participation as self-congruent and authentic, their acceptance and sustained engagement increase (Rahimi & Mosalli, 2024), and that external social ecologies can amplify ideal-self formation (Ishida, Manalo & Sekiyama, 2024). In parallel, DGBL's support for collaborative problem-solving and flow provides motivational "fuel" for persistence (Pan, Shao & Shakibaei, 2025).

In language learning, creative video games, including adventure games, increase participants' motivation to learn (Enayat & Haghighatpasand, 2019). Completing game missions and puzzles offers players a sense of accomplishment, which may increase motivation and lead to incidental language learning. Increased motivation reinforces the desired impact of the ideal L2 self (Hwang et al., 2016). Furthermore, ideal L2 self has been recognized as a self-motivation influencing factor in the willingness to communicate (e.g., Sak, 2020). More recent theorizing suggests examining instances of technology use as reshaping not only the ideal L2 self but also the actual L2 self within specific contexts (Hu, Zhang, & Hennebry-Leung, 2025). Emerging research suggests the mediating role of anxiety, mindset, and willingness to communicate on activity engagement (closely) and motivation (broadly) (Fan & Wang, 2025).

It can be concluded that the interactive and cooperative nature of video games, including authentic language use and the enjoyment experienced while playing, positively influenced the motivational aspect of language learning and the ideal self-concept of L2 learners. These characteristics of video games coincide with the principles of social constructivism and the positive motivational effects regarding the use of video games in language learning. They are also compatible with contemporary extensions of L2 motivation theory that foreground the role of actual L2 self, technology acceptance grounded in digital self-authenticity, and affective-cognitive pathways such as anxiety, mindset, and WTC (Hu, Zhang & Hennebry-Leung, 2025; Rahimi & Mosalli, 2024; Fan & Wang, 2025).

6. Conclusion

This study adds clear evidence that Saudi EFL undergraduates perceive active engagement in video gameplay as positively associated with their motivation to learn English and the development of their ideal L2 self. Both the quantitative results and the qualitative themes indicate that gameplay is experienced as enjoyable, immersive, and confidence-building, particularly in relation to vocabulary development, listening comprehension, and spoken communication. Games offer an engaging space where learners practice language, gain confidence, and begin to see themselves as competent users of English. In this sense, video games function not merely as entertainment but as meaningful informal learning environments that support motivational and self-conceptual dimensions of L2 learning.

From a pedagogical perspective, the findings suggest that teachers may productively build on learners' existing out-of-class gaming practices rather than viewing them as separate from formal learning. One simple step is using language diaries so students can log the English they encounter during gameplay; teachers can then design or recommend tasks that connect directly to these experiences (Pia & Wikström, 2015). Short, structured opportunities for reflection and sharing—such as brief classroom discussions about gameplay experiences, communication strategies used, or new language noticed—can help transform informal exposure into conscious learning. Such activities may also foster a supportive classroom community in which learners draw motivation from peers' experiences while developing greater ownership of their language learning.

At the same time, the results indicate that the perceived benefits of gameplay are not evenly distributed across all language skills. In particular, the relatively lower motivation reported for writing highlights the need for pedagogical mediation if teachers aim to leverage video games for more balanced language development. This underscores the importance of instructional scaffolding that helps learners

extend game-based motivation to less naturally supported skills, such as writing.

This study also has several limitations. First, the findings are based on self-reported perceptions, which may not fully reflect actual language development. Second, the absence of a control group of non-gamers and the cross-sectional design prevent causal conclusions about the effects of video gameplay. Third, although participants reported engaging in various game types, the study did not systematically examine differences across genres or gameplay features, which may differentially influence motivation and ideal L2 self formation. Therefore, the findings should be interpreted cautiously, as their generalizability may be limited to EFL learners in similar educational and cultural contexts.

Future research should therefore employ longitudinal or experimental designs, include control or comparison groups, and examine how specific game genres or features relate to different language skills and motivational outcomes. Incorporating objective measures of proficiency, classroom-based interventions, and in-depth qualitative methods such as interviews would further strengthen understanding of how video gameplay shapes both motivation and the ideal L2 self over time. Such work will help clarify not only whether video gameplay supports language learning, but how, for whom, and under what conditions its impact is most effective.

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Authors' contributions

Joud Almugren and Prof. Safaa Abdelhalim shared responsibility for conceptualization, methodology, resources, qualitative analysis, and manuscript writing, reviewing, and editing. Joud Almugren additionally conducted the data collection. All authors read and approved the final manuscript.

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