

The Use of Vocabulary Learning Strategies in an MMORPG Among Southeast Asian ESL Players

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ABSTRACT

This paper describes a study on the Vocabulary Learning Strategies (VLS) used by players from Southeast Asia in an MMORPG called Final Fantasy XIV. The objective is to identify the strategies the players used and their opinions of the game as a platform to assist their vocabulary learning. Fifty players who met the requirements of the study were selected and a survey was administered via a questionnaire (Cronbach's Alpha values 0.824 and 0.758). The results were analyzed using descriptive statistics. Results showed that Activation Strategies were the most preferred strategy while Cognitive Strategies were the least preferred. The players also reported a generally favorable opinion of the game as a method to learn and acquire English vocabulary. MMORPGs have been shown to be a viable tool for informal language learning and a suggestion is made on how language teachers may take advantage of this.

Keywords: vocabulary learning; MMORPG; tangential learning; informal learning; language acquisition

INTRODUCTION

The use of computer games for education is not a recent phenomenon. *Logo Programming*, widely considered as the first educational game, was released more than 50 years ago in 1967. It was not until the development and release of the successful game *Oregon Trail* in 1971 (Bouchard, 2017; Papadakis, 2018) that the educational community began to take note of the potentials that computer games have to offer. The commoditization and the gradual affordability of personal computers further push computer games into the mainstream. Together with new developments like CD-ROM and the internet, the 1980s and the 1990s saw the proliferation of education-oriented computer games and the introduction of Game-based Learning as a research topic (Habgood & Ainsworth, 2011). Walt Disney was widely credited with coining the term 'edutainment' (Cruz Jr, 2011) but it is through the easy access of computers in the 1990s that the term entered the global mainstream.

Computer games offer great potential for education. Jong et al. (2008) argued that there are intrinsic traits of computer games that make them suitable for education. These traits can be grouped into three perspectives based on a constructivist paradigm: motivational, cognitive, and socio-cultural perspectives. Since then, various researchers have further examined the benefits that computer games bring to education. Giannakos (2013) described the structures of activities contained in video games as beneficial for the development of several cognitive skills. Hewett (2020) concluded that the use of *Minecraft* in educational settings could help students develop their resourcefulness, problem-solving and social skills as well as multitasking ability. The impact and potentials of computer games are so varied that there now exists the term 'serious games' to describe entertaining games designed specifically for education (Juan et al.,

2017). However, some researchers cautioned against unwarranted enthusiasm for the use of computer games in education. For example, Mayer (2016) reviewed policy implications for the use of computer games in education and concluded that advocates presented more rhetoric than actual evidence and that games are effective only when used within certain settings and objectives. Mayer (2016) also cautioned educators not to confuse liking for learning.

In the field of language learning and more specifically EFL vocabulary learning, Fithriani (2021) summarized the benefits of computer games in relation to learning improvements, increase in motivation and interest, reduced anxiety, and promotion of learner autonomy. Nevertheless, there are studies that did not find any increase in performance or motivation (Fithriani, 2021). It could be argued that the research summarized above as well as research involving the use of serious games has a glaring deficiency when viewed from the perspective of second language acquisition in the sense that their settings were all within a formal learning framework. The connected nature of our global society as well as the advances in digital technology have sparked a renewed interest in informal language learning although the roots for it go back to the works of Krashen and d'Anglejan in the 1970s (Dressman, 2020). Dressman (2020) differentiated between acquisition (the "picking up" of language) versus learning (conscious, organized study) of language and argued that new technologies like social media and MMORPGs afford much more opportunities for acquisition compared to 30 years ago.

This renewed interest in informal aspects of learning is also reflected in the relatively recent term of "tangential learning", a term first coined by Daniel Floyd and James Portnow in 2008 (Mozelius et al., 2017). Tangential learning is where interest in games or their contents motivates learners to pursue further enrichment outside the games. There is little investigation on commercial, off-the-shelf (COTS) games such as Final Fantasy XIV MMORPG and their utility for informal language acquisition and even less that focus on Southeast Asian learners. COTS are meant to generate income for their developers and as such are designed to be engaging and entertaining. Their ability to keep players motivated is a great asset if properly exploited for the purpose of informal language acquisition. This paper intends to help fill the gap in vocabulary learning within the context of language acquisition by presenting a study on the vocabulary learning strategies used by players from the Southeast Asia region in an MMORPG (Massively Multiplayer Online Role-Playing Game) called Final Fantasy XIV. The study was guided by the following research questions:

1. What vocabulary learning strategies are employed by the players in the MMORPG environment?
2. What are the opinions of ESL players toward learning vocabulary through the MMORPG?

LITERATURE REVIEW

INFORMAL LANGUAGE LEARNING AND TECHNOLOGY

Early SLA theorists such as Krashen (1981) placed emphasis on the role of input in second language acquisition. The majority of input for language learners does not come from formal instruction in the classroom but rather from informal setting outside the confines of the classroom. Knowles (1950) introduced the idea of informal learning in education, and the idea was further adapted and refined for informal language learning (Marsick & Watkins, 1990). Rogers (2008) placed heavy emphasis on informal learning and considered it as foundational to all language learning. Toffoli and Sockett (2010) used the terms "unofficial, unscheduled

and impromptu" to describe informal language learning. They further explained that informal language learning refers to learners performing activities that are outside the formal structures of class- and teacher-based instructions with little to no initial intention of learning. Learners also do not follow a strict path for language mastery, with almost complete autonomy of what they wish to learn. Lastly, most informal language learning takes place within the constructs of society and community.

What the earlier theorists lacked when they recognized input as critical to language acquisition was a world that is digitally interconnected and information-centric such as those that can be found in the early 21st century. Godwin-Jones (2018) argued that technology has caused a major and critical shift in how language input happens. He described it as a complex, dynamic, and multimodal shift and "no easy task" to understand (p. 8). The shift is major enough that instead of using the terms language learning or language acquisition, he proposed the term L2 development as a wider, more encompassing term, and one that is highly appropriate for informal language learning in the current world. Additionally, he pointed out to social media and MMORPGs as salient examples of opportunities for informal language learning.

Thompson and von Gillern (2020), in their meta-analysis, concluded that contextualized video games can make a significant difference towards better vocabulary acquisition among students. They further suggested that more research is needed to understand how the processes occur and the use of commercially available, off-the-shelf games instead of serious games designed purposely for learning. This is the direction of the study described in this paper where the aim is to understand vocabulary learning strategies of players within a commercial MMORPG, Final Fantasy XIV. At this point, it is important to note that terms like "serious games" or "gamified learning" refer to games specifically designed for learning and are usually used within the constructs of specified learning objectives. A commercial MMORPG like Final Fantasy XIV is not a serious game and is designed for entertainment, not learning.

Studies on the benefits of MMORPGs for the process of language acquisition have highlighted several advantageous factors. The role-playing aspects of the games provide a strong layer of motivation (Danka, 2020) for players to be engaged with the game and its contents which can serve as authentic and multimodal language input (Scholz & Schulze, 2017). Players also learn to adapt and transfer language gained from the interactions with the in-game environment to player-to-player communication (Pirainen-Marsh & Tainio, 2009). Language serves as the foundation for communication and collaboration among players, and in MMORPGs, the language and interactions are diverse, complex and provide rich settings for learners to be exposed to actual language in use (Bytheway, 2015). Motivated players often engaged with "a wide range of ancillary reading and writing activities" (Godwin-Jones, 2018, p. 10) in order to be better able to enjoy the games. Players engaged in MMORPGs also display a lower anxiety toward the target language, which helps to overcome critical initial barriers to learning (Xu, 2020). One possible reason identified for the increase in motivation and decrease in anxiety is that players feel freer to explore and interact with the game environments when compared to the normal expectations of classroom learning (Walldén & Ardati, 2019). These factors suggest that MMORPGs offer a fertile ground to investigate the processes of L2 development within a highly informal context.

The use of games in education is not without challenges, and this extends to the use of MMORPGs even in informal settings. MMORPGs may not be suitable for players with a weak grasp of English (Rankin et al., 2006). The affordances of MMORPGs' social interactions, cultural exchanges and rich environments may only be helpful to adequately competent English language players that are emotionally and mentally capable of interacting with other players (Rama et al., 2012). Furthermore, there are risks associated with gaming in general. These

include the psychosocial well-being of players, especially among adolescents and young adults (Scott & Porter-Armstrong, 2013).

VOCABULARY LEARNING STRATEGIES

Goundar (2019) argued that vocabulary learning has been given emphasis after the shift from earlier focus on mastery of structural and grammatical forms in language teaching approaches. He also identified motivation as a significant factor that enables learners to become independent learners of vocabulary. This fits in with the main strength of MMORPGs which is player motivation. There are different taxonomies proposed to classify vocabulary learning strategies such as the ones by Schmitt (1997), Gu and Johnson (1996) and Nation (2001). Schmitt (1997) identified categories of strategies for language learning in general, while Gu and Johnson (1996) based their taxonomies within EFL contexts. These taxonomies share similarities but often use different terms, thus making comparison of research findings rather difficult (Bytheway, 2015).

Gu and Johnson (1996) proposed a four-item categorization of vocabulary learning strategies: metacognitive, cognitive, memory and activation. Ghazal (2007) provided a tabular summary of Gu and Johnson's (1996) categorization in Table 1.

TABLE 1. Gu and Johnson (1996) VLS Categorization (Ghazal, 2007)

Metacognitive	Cognitive	Memory	Activation
Selection: Identifying the essential words for comprehension Self-Initiation: Using various methods to interpret the meanings of words.	Guessing: Using linguistic terms. Using Dictionaries Note-Taking	Rehearsal: Word lists and repetition. Encoding: Association (Imagery, Visual)	Usage of words in various context.

Bytheway (2015) took a grounded approach in investigating vocabulary learning strategies in an MMORPG. Data was collected using qualitative methods and categorized by the researcher into 15 categories of strategies. Attempts to match the discovered categories to existing ones proved rather difficult as mentioned because of the different classification and use of similar terms. Ng et al. (2021) used similar data collection approach to Bytheway (2015)'s but with lesser number of subjects (4 vs 6). However, Ng et al. (2021) made use of Gu and Johnson's (1996) VLS as the framework to discuss their findings.

Similarly, the study described in this paper adopted Johnson and Gu's (1996) classification. However, the method of data collection is quantitative as the research aimed to cover more subjects from different countries in Southeast Asia in order to discover patterns of their VLS. The methodology is discussed further in the following section.

METHODOLOGY

The study aimed to investigate patterns across a large population, and this made a quantitative method of investigation more suitable for the purpose. In this case, the purpose and nature of the investigation support the use of quantitative method, as argued by Seliger and Shohamy (1989), for SLA research. The studies by Bytheway (2015) and Ng et al. (2021) used qualitative methods for their investigation. However, they looked at a very small sample for their studies.

The instrument used in this study was based on Goundar's (2019) VLS questionnaire with an addition of a single category for opinion adapted from Ng et al. (2021). The participants

were made up of 50 players from the Southeast Asian region. Participant recruitment faced several initial difficulties. First, as the game is available globally, the researchers had to narrow down those who were from the target region. Secondly, the game does not have a server specifically for Southeast Asia and the closest available is for Japan. The researchers had to use other sources of recruitment which included Discord servers and Facebook player community pages. The participants for the study must also have at least one-year experience in the game. The final list consisted of 50 players from the region with the breakdown of their profile in terms of age, gender, years of playing the game, and English language proficiency presented in Figures 1 to 4, respectively.

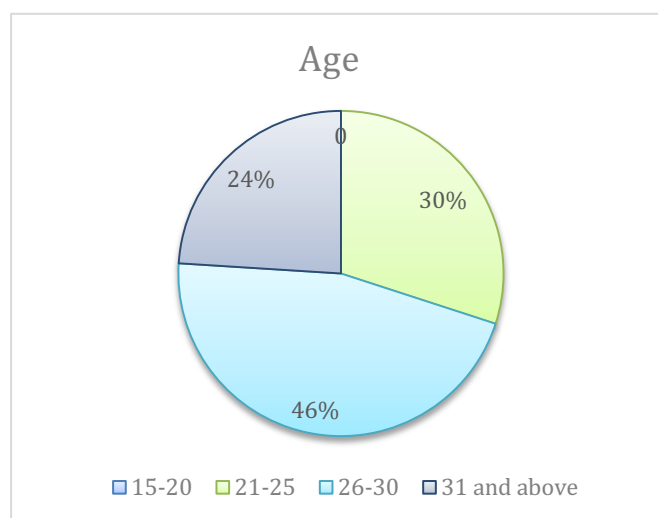


FIGURE 1. Age of respondents

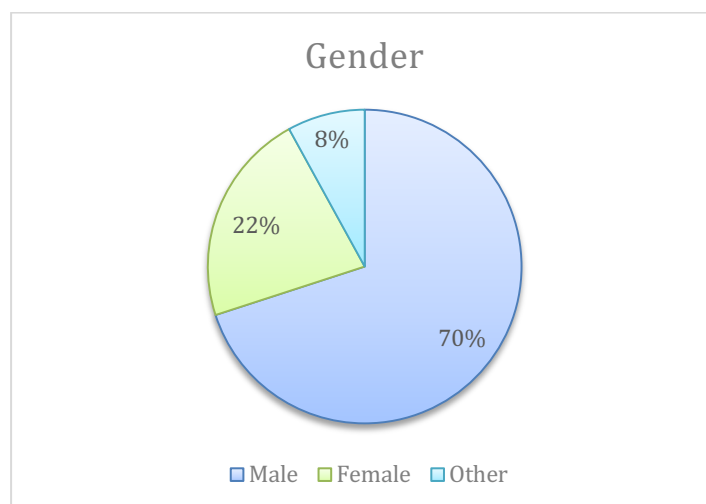


FIGURE 2. Respondents by Gender

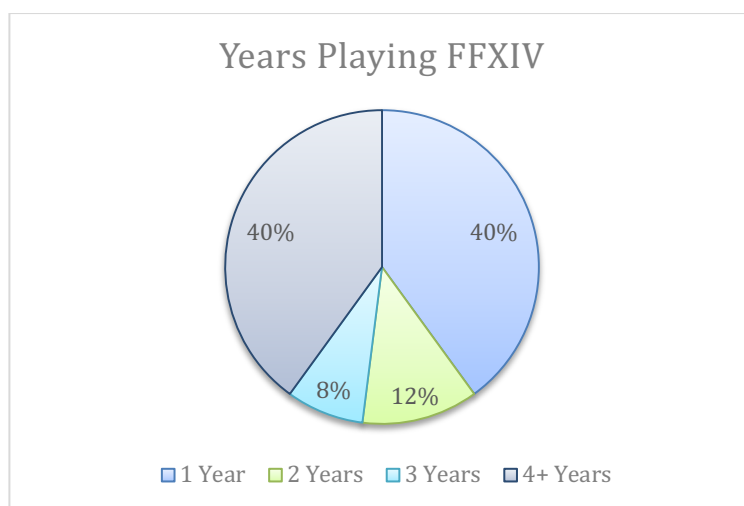


FIGURE 3. Years playing FFXIV

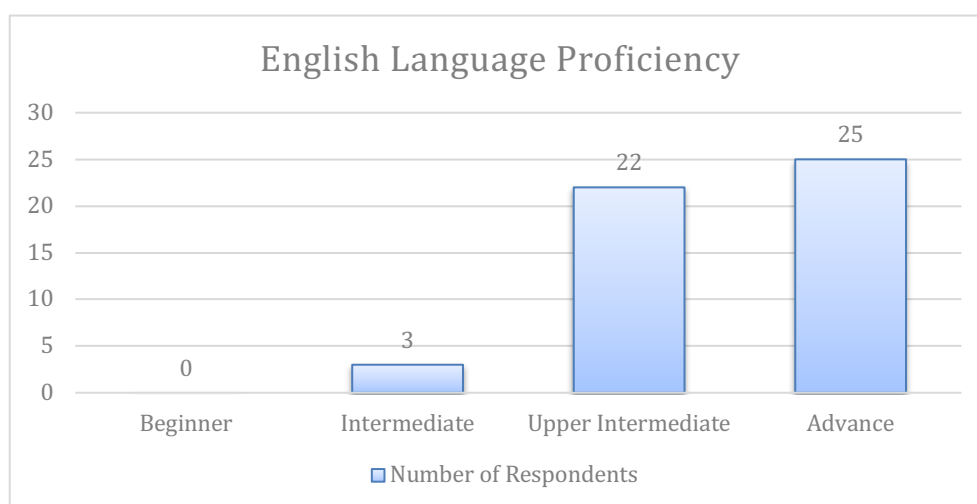


FIGURE 4. English Language Proficiency of the Respondents

The demographics are notable for two pieces of data. Firstly, there were no respondents in the 15-20 age range although MMORPGs are usually targeted for those in that age group (Mohd Yunus et al., 2021). Secondly, none of the respondents reported English language proficiency level of a ‘Beginner’. This reflects the assertion by Rankin et al. (2006) that MMORPGs are more suitable and enjoyable for players with above basic proficiency in the English language.

FINDINGS AND DISCUSSION

This section is presented in two parts to better illustrate the research questions investigated by the study. The two research questions are:

1. What vocabulary learning strategies are employed by the players in the MMORPG environment?
2. What are the opinions of ESL players toward learning vocabulary through the MMORPG?

VOCABULARY LEARNING STRATEGIES IN MMORPG ENVIRONMENT

This section presents the data from the survey administered to the respondents based on the classification of strategies as proposed by Gu and Johnson (1996). The data for each category is presented in its own table. This is followed by a discussion of the results as shown in the tables. Before continuing with the discussion of the data, the internal consistency of the instrument used is firstly presented in Table 2. The instrument is in the form of a Likert-type scale, and the most suitable test of reliability for the scale is the Cronbach's Alpha (Olaniyi, 2019). Table 2 shows the results of the reliability test where the values of the Cronbach's Alpha demonstrated that the instrument is considered reliable.

TABLE 2. Reliability Test (N=50)

Type	Number of Items	Cronbach's Alpha
Vocabulary Learning Strategy used by players in FFXIV	20	.824
Opinions on Vocabulary learning through FFXIV	5	.758

Although Likert scales are generally considered as ordinal, some researchers have argued that in social sciences research, they could be measured as interval (Wu & Leung, 2017). For this study, the interval measurements are labelled as follows: values ranging from 1 to 1.75 - Strongly Disagree; 1.75 to 2.50 - Disagree; 2.50 to 3.25 - Agree; and values ranging from 3.25 to 4.00 - Strongly Agree.

METACOGNITIVE STRATEGIES

TABLE 3. Metacognitive Strategies (N=50)

Statement	Strongly Agree	Agree	Disagree	Strongly Disagree	Mean
I try to find out all I can about the new words I learn.	8 (16%)	36 (72%)	4 (8%)	2 (4%)	3.12
Sometimes I think about my vocabulary when I play FFXIV.	10 (20%)	25 (50%)	10 (20%)	5 (10%)	2.90
I look up words that I'm interested in.	26 (52%)	16 (32%)	5 (10%)	3 (6%)	3.38
I note down words that seem important to me.	7 (14%)	15 (30%)	20 (40%)	8 (16%)	2.50
I know which words are important for me to learn.	10 (20%)	25 (50%)	10 (20%)	5 (10%)	2.93

Table 3 shows that the highest mean was for *I look up words that I'm interested in* followed by *I try to find out all I can about the new words I learn* with values of 3.38 and 3.12, respectively. The lowest mean was for *I note down words that seem important to me* at 2.50 which met the minimum for 'Agree'.

COGNITIVE STRATEGIES

TABLE 4. Cognitive Strategies (N=50)

Statement	Strongly Agree	Agree	Disagree	Strongly Disagree	Mean
I use an English dictionary (physical and/or online).	18 (36%)	23 (46%)	3 (6%)	6 (12%)	3.06
I translate the word into my native language.	11 (22%)	11 (22%)	13 (26%)	15 (30%)	2.36
I write down the words I don't know on my phone or book.	2 (4%)	5 (10%)	21 (42%)	22 (44%)	1.74

I take note of the meaning of the word I just learned.	7 (14%)	23 (46%)	14 (28%)	6 (12%)	2.62
I write down the English word and my native translation of it.	2 (4%)	7 (14%)	21 (42%)	20 (40%)	1.82

Table 4 displays the results for the Cognitive strategies. Among the listed strategies, only the use of dictionaries passed the 2.50 mark for Agree. The least agreed upon strategy was *I write down the English word and my native translation of it* with a mean of only 1.82.

MEMORY STRATEGIES

TABLE 5. Memory Strategies (N=50)

Statement	Strongly Agree	Agree	Disagree	Strongly Disagree	Mean
I repeat it aloud to myself.	3 (6%)	20 (40%)	20 (40%)	7 (14%)	2.38
I write it repeatedly.	2 (4%)	7 (14%)	28 (56%)	13 (26%)	1.96
I use it multiple times with other people.	12 (24%)	25 (50%)	10 (20%)	3 (6%)	2.92
I associate the word with something I am familiar with.	17 (34%)	28 (56%)	3 (6%)	2 (4%)	3.20
I analyze the word by breaking it into different parts (prefix, root, suffix).	7 (14%)	19 (38%)	16 (32%)	8 (16%)	2.50

Memory strategies shown in Table 5 indicate the preference of the respondents to associate new words with familiar things or concepts (*I associate the word with something I am familiar with* = Mean of 3.20). The second highest scoring strategy was more communicative in nature, *I use it multiple times with other people*, with a mean of 2.92. The more mechanical aspects of Memory strategies such as *I write it repeatedly* and *I repeat it aloud to myself* had the lowest mean scores.

ACTIVATION STRATEGIES

TABLE 6. Activation Strategies (N=50)

Statement	Strongly Agree	Agree	Disagree	Strongly Disagree	Mean
I make use of the words I learned in speaking and writing.	13 (26%)	32 (64%)	4 (8%)	1 (2%)	3.22
I make use of the words I learned in everyday situations.	8 (16%)	27 (54%)	13 (26%)	3 (6%)	2.83
I make use of the words I learned in in-game communication.	14 (28%)	29 (58%)	5 (10%)	2 (4%)	3.28
I ask other players the meaning of a word I don't understand.	15 (30%)	21 (42%)	8 (16%)	6 (12%)	3.05
I ask other players to explain how to use a word I don't understand.	13 (26%)	15 (30%)	13 (26%)	9 (18%)	2.85

The category for Activation Strategies has the distinction of being the only category where the mean scores were all above the 2.50 base score for 'Agree'. The highest scoring statements in the list were *I make use of the words I learned in in-game communication* (Mean=3.28), and *I make use of the words I learned in speaking and writing* (Mean=3.22). It is also notable that the majority of the respondents made use of the community as an aid to learning, as it can be seen from the scores for the statements *I ask other players the meaning*

of a word I don't understand, and I ask other players to explain how to use a word I don't understand.

VOCABULARY LEARNING STRATEGIES: DISCUSSION

This section presents the discussion of the data on Vocabulary Learning Strategies as presented in Tables 3-6. Metacognitive strategy in VLS refers to learner's capability of understanding their own thought processes when it comes to defining the meaning of new vocabulary words (Zarrin & Khan, 2014). The data shown in Table 3 indicate that the majority of respondents made use of metacognitive strategies for their vocabulary learning. This is similar to the findings from previous research (Bytheway 2015). Additionally, the ability to employ metacognitive strategies requires an adequate level of motivation, and this is where MMORPGs shine (Godwin-Jones, 2018).

Cognitive Strategies were the least preferred strategy by the respondents based on the total mean score of each item as presented in Table 4. This is hardly a surprise as Kobayashi and Little (2018) pointed out that previous research has established that Cognitive Strategies are preferred by beginners, and none of the respondents in this study rated themselves to be in that category. This also ties in with the argument that MMORPGs are not very suitable for beginners (Rankin et al., 2006). What is notable here is that Kobayashi and Little (2018) also mentioned that certain Asian cultures like Japanese and Chinese are more favorable to Cognitive Strategies because of cultural factors and an educational background dominated by rote learning for language. This does not seem to be the case for the respondents in this study who were from Southeast Asian countries. Thus, the differences between EFL learners from different Asian countries and cultures could be another dimension for further research.

Memory Strategies are differentiated from Cognitive Strategies by its characteristic of "deeper" processing and are considered better for effective retention of vocabulary (Nemati, 2009). Although generally favored by proficient learners (Schmitt, 1997), there are practical considerations for why they are not usually used. This includes time constraints and difficulties in associating complex words and terms (Kobayashi & Little 2018). The authors of this paper argue that MMORPGs assist learners to overcome these limitations. MMORPGs such as FFXIV are multimodal; the visual, audio, contextual and descriptive elements in the game provide an engaging method for ESL learners to apply word association. This could be the factor that made word association strategy the most agreed upon Memory strategy with 90% of the respondents reporting it in the 'Strongly Agreed' (34%) and 'Agreed' (56%) category.

Activation Strategies seem to be the most favored strategy among the respondents, with all the listed strategies scoring above the threshold of 2.50 for 'Agree'. Activation strategies are, in essence, the usual acts of 'practicing' the vocabulary both in social and personal settings which often lead to better retention (Gu, 2003). These strategies are often employed by learners who are already comfortable with their grasp of the language and are usually avoided by beginners especially in social settings (Huh, 2009; Sasidaran et al., 2021). The two highest scoring strategies in Table 6 show a transference of learning from the virtual environment of MMORPGs to the real-life situations of language use. This pattern of transference has been noted by other researchers as well (Kongmee et al., 2011; Li et al., 2021). More importantly, the activation strategies listed fit well with the idea of tangential learning (Mozelius et al., 2017) and informal language acquisition (Dressman, 2020). It can be argued that in addition to the reported proficiency levels of the respondents (Intermediate, Upper Intermediate and Advance), the nature of the environment itself encourages social learning as can be seen in the response to items *I ask other players the meaning of a word I don't understand* and *I ask other players to explain how to use a word I don't understand*.

ESL PLAYERS' OPINIONS ON LEARNING VOCABULARY THROUGH THE MMORPG

These five statements listed in Table 7 stemmed from the intention of identifying the respondents' opinions on the use of Final Fantasy XIV for the purpose of learning and acquiring vocabulary. The statements were adapted from the interview structure presented in Ng et al. (2021).

ESL PLAYERS' OPINIONS

TABLE 7. Opinions (N=50)

Statement	Strongly Agree	Agree	Disagree	Strongly Disagree	Mean
Final Fantasy XIV is a good way to learn new words.	13 (26%)	24 (48%)	11 (22%)	2 (4%)	2.96
I am better able to learn new words through Final Fantasy XIV compared to an English classroom.	8 (16%)	25 (50%)	13 (26%)	4 (8%)	2.74
Final Fantasy XIV has multiple ways of learning new words.	13 (26%)	30 (60%)	5 (10%)	2 (4%)	3.08
I am more comfortable using new words with other players than in an English classroom.	15 (30%)	22 (44%)	11 (22%)	2 (4%)	3.00
Final Fantasy XIV is a good learning environment.	17 (34%)	23 (46%)	9 (18%)	1 (2%)	3.12

The respondents believe that Final Fantasy XIV is a good environment for learning in general (80% Agree). In order to provide immersive experience for players, MMORPGs need to have rich environments (Azman & Farhana Dollsaid, 2018; Walldén & Ardati, 2019) and naturally these environments provide opportunities for tangential learning (Turkay & Adinolf, 2012). When it comes to learning new vocabulary, 74% of respondents believe that the game is good for the purpose. The number is still significant, however. It would be interesting to find out if those who disagreed are already advanced in their English language proficiency. Unfortunately, the correlation between this item and their reported proficiency was not part of the data analysis.

An even bigger number (86%) of respondents believe that Final Fantasy XIV provide multiple ways to learn new words. Once again, this is a testament to the strengths of virtual environments embodied by the role-playing genres such as MMORPGs. Only 66% of the respondents believe that they are better able to learn vocabulary in the game compared to the classroom. The less stressful and freer facet of MMORPGs has been identified by previous research as a big bonus to language acquisition (Godwin-Jones, 2018; Walldén & Ardati, 2019). Overall, the respondents reported favorable opinion of the game's suitability for learning as all the items listed in Table 7 scored mean values of above 2.50.

CONCLUSION

The paper has presented the results of a study on the use of vocabulary learning strategies among Southeast Asian players within the MMORPG game Final Fantasy XIV. The results showed that the players made use of all the four categories of strategies proposed by Gu and Johnson (1996). The least preferred category was Cognitive Strategy which is typical for learners who progressed beyond the basic level of proficiency in the language. The most preferred category was Activation Strategies, and this seems to result from the affordances of the game environment itself. The interconnected and communal design of such game worlds does allow for plenty of associative practice and collaborative learning among the players. MMORPGs are highly interactive with rich visuals and environmental input which enable high

levels of interactivity for the players. This study has confirmed the findings of various past studies on MMORPGs that pointed out the rich affordances of such an environment for language acquisition and learning. Moreover, the players' opinions on the game as a method to acquire English vocabulary were also generally positive. Future research could improve on the sampling method employed by the current study by having a balanced and representative sample from the countries in Southeast Asia. The current study also did not look at individual countries within Southeast Asia. Further investigations on VLS within MMORPGs could determine if the cultural backgrounds and English learning experience are strong factors in the participants' choice of strategies. This study could also be enhanced by the use of mixed methodology instead of only a quantitative one. Previous similar studies such as Bytheway (2015)'s and Ng et al. (2021)'s were also limited to a single methodology (qualitative only).

The logical question to ask next is how do the findings help language teachers and practitioners? The answer is not as straightforward as some would have liked it to be. It must be remembered that MMORPGs are designed solely for entertainment which is unlike their 'serious games' counterparts. MMORPGs would not readily fit into any curriculum or proficiency paths that language teachers have prepared for their students. However, if the objective is learners' engagement with the target language regardless of the curriculum, then MMORPGs can play a big role. Commercial games outshine their educational counterparts in game design and mechanics, not educational contents, but are usually more engaging and motivating as a result. From the perspective of informal language acquisition and tangential learning presented earlier, MMORPGs have great potential to offer educators and learners. A language teacher can capitalize on this by designing classroom learning materials that draw on (and build upon) the language that learners engage with in MMORPGs. This is no different from the use of corpus to inform the materials design of ESP courses, for example.

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