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Gamification and English Language Learning: Enhancing Reading and Speaking Skills and Motivation Among B40 Students

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***Abstract*—The study investigated the impact of gamification on enhancing English language reading and speaking skills and motivation among B40 students. 100 primary school students from the B40 economic group participated in this study. This study employs a mixed-methods research design, where data are collected both quantitatively and qualitatively through pre- and post-tests, surveys, and interviews. The findings suggest that gamification has a positive impact on enhancing reading and speaking skills, while also increasing the motivation of B40 students to learn the English language. The findings underscore the importance of incorporating gamified approaches into English language instruction to bridge learning gaps and promote inclusivity.**

***Index Terms*—B40, gamification, reading skill, speaking skill**

I. Introduction

Malaysian households are divided into three income groups: the bottom 40% (B40), middle 40% (M40), and top 20% (T20). The B40 group, comprising households with monthly incomes below RM3,860, represents the country's most economically disadvantaged population (Thangiah et al., 2020). Raising this group to the middle class is a primary goal of the Eleventh Malaysia Plan (11MP). However, B40 students encounter significant obstacles in gaining English proficiency due to limited exposure, low motivation, and little support at home (Mahamod et al., 2021). Traditional language teaching often fails to meet their needs, further widening the proficiency gap (Zainol, 2021).

This study examines how gamification can improve English language learning among B40 students by increasing engagement, motivation, and inclusivity. Gamified learning environments provide personalized, interactive experiences that can help close learning gaps and support both academic and socio-economic development (Annamalai et al., 2021; Pektas & Kepceoglu, 2019). By tackling the specific challenges faced by B40 learners, gamification serves as an effective tool for enhancing language skills.

Focusing on B40 students in Penang, this study investigates the use of different gamified platforms to improve reading and speaking skills while boosting motivation. The findings aim to help teachers and curriculum developers find more effective strategies for teaching English.

The research questions guiding this study are:

1. To what extent can gamification enhance the reading and speaking skills of B40 students?
2. What aspects of gamification motivate B40 students to improve their English language proficiency?

This study is grounded in three key theories: Stephen Krashen's Theory of Second Language Acquisition (Krashen, 1982), Goal Setting Theory (Locke & Latham, 2019), and Self-Determination Theory (Ryan & Deci, 2022). These frameworks collectively support the integration of motivational elements, goal-oriented learning, and low-anxiety environments in language instruction—core features of gamified learning. In this study, participants engaged in gamified lessons designed to enhance motivation and language proficiency. At the production stage of each lesson, learners set goals and work toward achieving them, aligning with the Goal Setting Theory. Self-Determination Theory (SDT), which categorizes motivation as intrinsic, extrinsic, or amotivation, further explains how gamified tasks sustained student engagement and autonomy. Widely used in educational contexts, SDT offers a valuable perspective for understanding how gamification supports meaningful language learning (Chen & Zhao, 2022).

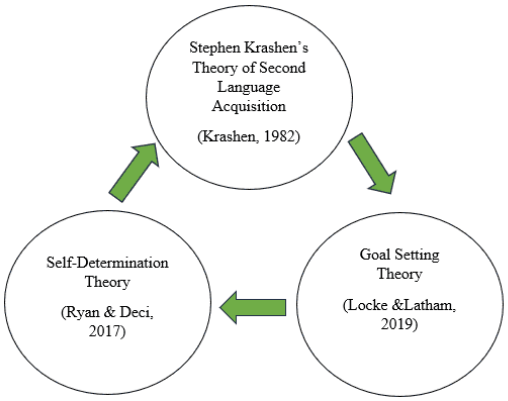

Figure 1. Theories Used in This Study

II. Methods

A. Research Design

To address the research questions, the current study employed a sequential explanatory mixed-method research design. The strengths of both quantitative and qualitative approaches have been incorporated into the mixed methods study design, and each step was completed to provide a deeper understanding of the research topics. Both quantitative and qualitative data were gathered for this investigation, analyzed independently, and then combined (Othman et al., 2020). The qualitative data significantly enhanced the conclusions drawn from the quantitative data. Surveys, interviews, and participant assessments provided the data for this study. The data collection techniques used to address the study's research questions are depicted in Figure 2 and the following diagram.

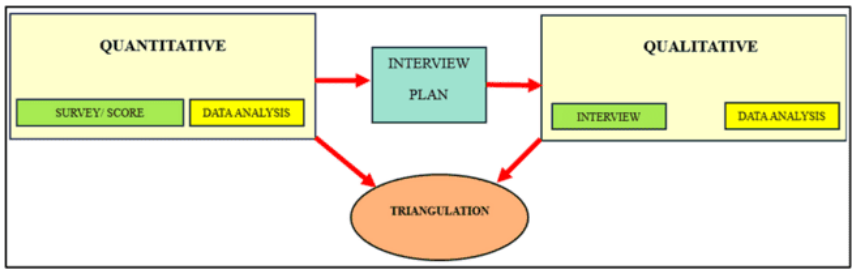

Figure 2. Data Collection Method

B. Participants

A total of 100 B40 students aged 7 to 12 from an education center in Penang took part in the study. They were chosen using cluster purposive sampling from existing classes consisting of students with similar English proficiency but from different school types—National, Chinese, and Tamil medium. To protect confidentiality and minimize bias, pseudonyms were assigned to all participants.

C. Research Site

The study took place at the Buddhist Tzu Chi Education Centre, a Taiwan-based NGO located in urban Penang. The center supports students from diverse income levels and ethnic backgrounds, mainly Chinese and Indian. In 2021, it introduced the Hope Children Project to offer educational sponsorships for B40 students across Penang. Participants in this research were chosen from students enrolled in this program.

TABLE 1
PARTICIPANTS, SAMPLING METHOD, DATA COLLECTION, AND DATA ANALYSIS

	Pre-Test (English Language Proficiency Test 1)				
	N.O. OF PARTICIPANTS	**SAMPLING METHOD**	**DATA COLLECTION**	**DATA ANALYSIS**	**THEORY**
PHASE 1	100 B40 students	Cluster Purposive Sampling	English Language Proficiency Test 1	SPSS	1. Krashen's Theory of Second Language Acquisition 2. Goal-Setting Theory 3. Self-Determination Theory

	Intervention (8 Weeks)				
	N.O. OF PARTICIPANTS	**SAMPLING METHOD**	**DATA COLLECTION**	**DATA ANALYSIS**	**THEORY**
PHASE 2	100 B40 students	Cluster Purposive Sampling	Online Gamified Activities (Participant Scores)	SPSS	1. Krashen's Theory of Second Language Acquisition 2. Goal-Setting Theory 3. Self-Determination Theory

	Post-Test (English Language Proficiency Test 2)				
	N.O. OF PARTICIPANTS	**SAMPLING METHOD**	**DATA COLLECTION**	**DATA ANALYSIS**	**THEORY**
PHASE 3	100 students	Cluster Purposive Sampling	English Language Proficiency Test 2	SPSS	1. Krashen's Theory of Second Language Acquisition 2. Goal – Setting Theory 3. Self-Determination Theory

	Survey				
	N.O. OF PARTICIPANTS	**SAMPLING METHOD**	**DATA COLLECTION**	**DATA ANALYSIS**	**THEORY**
PHASE 4	60 students	Random Sampling	Survey	SPSS	1. Krashen's Theory of Second Language Acquisition 2. Goal – Setting Theory 3. Self-Determination Theory

	Interview				
	N.O. OF PARTICIPANTS	**SAMPLING METHOD**	**DATA COLLECTION**	**DATA ANALYSIS**	**THEORY**
PHASE 5	20 Students	Random Sampling	Interview Questions	Thematic Analysis	1. Self-Determination Theory

D. Research Procedure

The lesson structure followed a standardized lesson plan, including learning objectives, learning outcomes, as well as pre-, during, and post-lesson activities. The lessons were conducted by the teacher at the education center, and links to the gamified platforms were given for students to access on their laptops. For the speaking activity, students were placed in groups to carry out discussions. Their respective teachers monitored the discussion and awarded marks on the spot. Every session was recorded for data collection and analysis. The procedure of the gamified lesson is illustrated below.

TABLE 2
RESEARCH PROCEDURE

Skill: Reading			
Week/ Duration	Topic	Learning Standard	Gamified Platform
1 60 minutes	The Solar System	3.1 Recognise words in linear and non-linear texts by using knowledge of the sounds of letters 3.2 Understand a variety of linear and non-linear print and digital texts by using appropriate reading strategies 3.3 Read independently for information and enjoyment	Kahoot!
3 60 minutes	Holi Diary!	3.1 Recognise words in linear and non-linear texts by using knowledge of the sounds of letters 3.2 Understand a variety of linear and non-linear print and digital texts by using appropriate reading strategies 3.3 Read independently for information and enjoyment	Kahoot!
5 60 minutes	Future Cities	3.1 Recognise words in linear and non-linear texts by using knowledge of the sounds of letters 3.2 Understand a variety of linear and non-linear print and digital texts by using appropriate reading strategies 3.3 Read independently for information and enjoyment	WordWall
7	Digital Citizenship	3.4 Recognise words in linear and non-linear texts by using knowledge of the sounds of letters 3.5 Understand a variety of linear and non-linear print and digital texts by using appropriate reading strategies Read independently for information and enjoyment	WordWall
2 60 minutes	School Lunch Menu	1.1 Communicate simple information intelligibly 1.2 Use appropriate communication strategies 1.3 Communicate appropriately to a small or large group	WordWall
4 60 minutes	The 3 R's	2.1 Communicate simple information intelligibly 2.2 Use appropriate communication strategies 2.3 Communicate appropriately to a small or large group	Kahoot!
6 60 minutes	Say No to Bullying	2.1 Communicate simple information intelligibly 2.2 Use appropriate communication strategies 2.1 Communicate appropriately to a small or large group	Kahoot!
8	Food Waste	2.3 Communicate simple information intelligibly 2.4 Use appropriate communication strategies Communicate appropriately with a small or large group	Kahoot!

III. RESULTS AND DISCUSSION

Table 3 presents the scores for both the pre-test (R1) and the post-test (R4). For the pre-test, R1, the mean score was calculated to be 3.07. This value represents the average performance of the participants before the intervention or test. The post-test scores are defined as R4. The mean score for the post-test was 3.61, which shows an improvement compared to the pre-test.

A. Reading Score

TABLE 3
PAIRED SAMPLE STATISTICS OF THE READING SCORE

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	R1	3.07	99	1.172	.118
	R4	3.61	99	1.028	.103

As shown in Table 3, the paired samples t-test analysis revealed a statistically significant improvement in scores from the pre-test (R1) to the post-test (R4), indicating the effectiveness of the intervention conducted between the two assessments. The mean difference is -0.535, suggesting that post-test scores were, on average, higher than pre-test scores. This reflects a consistent increase in performance across participants. The standard deviation of the differences is 0.773, indicating some variability in individual score changes, although the overall trend remained positive.

The standard error of the mean difference is 0.078, signifying a precise estimate of the mean difference and reinforcing the reliability of the results. The consistent increase in scores, supported by the confidence interval and a highly significant p-value, confirms the positive impact of the intervention. In summary, the paired samples t-test results offer strong evidence of a statistically significant improvement from pre-test to post-test. These findings emphasize the effectiveness of the intervention and highlight its potential to improve performance in similar educational settings.

TABLE 4
PAIRED SAMPLE TEST

Paired Samples Test

		Paired Differences					t	df	Significance	
					95% Confidence Interval of the Difference					
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			One-Sided p	Two-Sided p
Pair 1	R1 - R4	-.535	.773	.078	-.690	-.381	-6.887	98	<.001	<.001

TABLE 5
PAIRED SAMPLES EFFECT SIZES

Paired Samples Effect Sizes

			Standardizer[a]	Point Estimate	95% Confidence Interval	
					Lower	Upper
Pair 1	R1 - R4	Cohen's d	.773	-.692	-.910	-.471
		Hedges' correction	.776	-.690	-.907	-.469

a. The denominator used in estimating the effect sizes.
Cohen's d uses the sample standard deviation of the mean difference.
Hedges' correction uses the sample standard deviation of the mean difference, plus a correction factor.

B. Speaking Score

The effect size analysis further supports the statistical findings and emphasizes the practical significance of the intervention. Cohen's d was -0.773 (95% CI: -0.910 to -0.471), indicating a medium-to-large effect size and a meaningful improvement in post-test scores. The negative sign reflects the direction of change, with scores increasing from pre-test to post-test.

Similarly, Hedges' g, adjusted for small sample bias, was -0.776 (CI: -0.907 to -0.469), closely aligning with Cohen's d. Given the large sample size, the correction was minimal, reinforcing the consistency and robustness of the results.

In sum, both effect size measures confirm that the intervention had a meaningful and practical impact on participants' performance, underscoring its effectiveness in achieving the intended outcomes.

TABLE 6
PAIRED SAMPLES STATISTICS FOR SPEAKING SCORES

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	S1	2.59	99	.969	.097
	S4	3.12	99	1.091	.110

The analysis of speaking scores for Pair 1, comparing pre-test (S1) and post-test (S4), shows an improvement in participants' speaking skills after the intervention. The average pre-test score was 2.59 (SD = 0.969, SE = 0.097), while the post-test average increased to 3.12 (SD = 1.091, SE = 0.110), based on 99 participants. This increase indicates a positive impact of the intervention on speaking performance.

Although there was a slight increase in score variability, the consistent rise in mean scores indicates an overall improvement. However, to determine if this change is statistically significant, the paired samples test results, especially the t-value and p-value, must be reviewed. These results will confirm whether the observed improvement is genuine or due to chance.

In summary, the descriptive statistics suggest a notable enhancement in speaking skills, with further statistical testing required to validate the significance of this improvement.

TABLE 7
PAIRED SAMPLES TEST FOR SPEAKING SCORE

Paired Samples Test

		Paired Differences					t	df	Significance	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			One-Sided p	Two-Sided p
Pair 1	S1 - S4	-.535	.690	.069	-.673	-.398	-7.722	98	<.001	<.001

The analysis of speaking scores (S1: pre-test, S4: post-test) shows a statistically significant improvement after the intervention. The mean difference of -0.535 indicates that post-test scores were, on average, 0.535 points higher than pre-test scores. The standard deviation of the differences was 0.690, with a standard error of 0.069, indicating a reliable estimate with moderate variability among participants.

The 95% confidence interval for the mean difference ranges from -0.673 to -0.398, reinforcing that post-test scores consistently exceeded pre-test scores. The t-value of -7.722, with 98 degrees of freedom, and a p-value < 0.001, confirm that the improvement is highly significant and unlikely due to chance.

In summary, the significant increase from a mean of 2.59 (pre-test) to 3.12 (post-test) clearly shows the intervention's effectiveness in improving speaking skills. These results not only confirm the reliability of the findings but also emphasize the practical importance of the improvement, supporting the intervention's positive effect on speaking proficiency.

TABLE 8
PAIRED SAMPLES EFFECT SIZES FOR SPEAKING SCORE

Paired Samples Effect Sizes

			Standardizer[a]	Point Estimate	95% Confidence Interval Lower	Upper
Pair 1	S1 - S4	Cohen's d	.690	-.776	-.999	-.550
		Hedges' correction	.692	-.773	-.996	-.548

a. The denominator used in estimating the effect sizes.
Cohen's d uses the sample standard deviation of the mean difference.
Hedges' correction uses the sample standard deviation of the mean difference, plus a correction factor.

The effect sizes for the increase in speaking scores were calculated using Cohen's *d* and Hedges' correction, both of which provide important insights into the practical significance of the observed improvements.

For Cohen's *d*, the point estimate is 0.690, which suggests a moderate effect size. This means that the increase in speaking scores from pre-test to post-test represents a meaningful performance improvement, attributable to the intervention. The 95% confidence interval for Cohen's *d* ranges from -0.776 to -0.550, and since the entire confidence interval is negative, it further supports the conclusion that the post-test scores were consistently higher than the pre-test scores, reinforcing the impact of the intervention.

Similarly, Hedges' correction yielded a point estimate of 0.692, with a 95% confidence interval ranging from -0.773 to -0.548. This value is very close to Cohen's *d*, indicating that the effect size is nearly identical across both measures. While Hedges' correction is typically used for smaller sample sizes, the correction in this case is not substantial because the sample size is sufficiently large. The fact that both the point estimates for Cohen's d and Hedges' g are moderate and their confidence intervals are entirely negative further strengthens the conclusion that the intervention had a significant impact on participants' speaking abilities.

In summary, both Cohen's *d* and Hedges' correction indicate a moderate effect size, suggesting that the intervention was effective in enhancing participants' speaking performance. The negative confidence intervals for both measures confirm that the improvement in speaking scores was consistent and reliable. Therefore, we can conclude that the intervention not only led to a statistically significant increase in speaking scores but also produced a practical and meaningful improvement in participants' speaking skills.

C. Survey

To examine how gamification can help overcome the challenges faced by the B40 students, this study used a survey to collect data on participants' experiences, attitudes, and perceived progress in reading and speaking skills. The survey was administered to 60 B40 students who engaged with gamified English learning modules over the six-week period.

The survey aimed to address two research questions: (1) What is the impact of gamification on the reading and speaking skills of B40 students? and (2) How does gamification motivate B40 students to improve their reading and speaking abilities? The questionnaire consisted of 14 Likert-scale items and was distributed in printed form for students to complete.

Participants were chosen by the teacher from the education centre, and their responses were anonymized to maintain confidentiality.

The findings demonstrate a notable improvement in participants' English language skills after the gamified lessons were implemented. As illustrated in Figure 3, more than 50% of the participants strongly agreed that their reading and speaking skills had significantly improved. This outcome highlights the positive impact of gamification on students' learning processes, aligning with the study's objective to explore its effectiveness in enhancing reading and speaking skills.

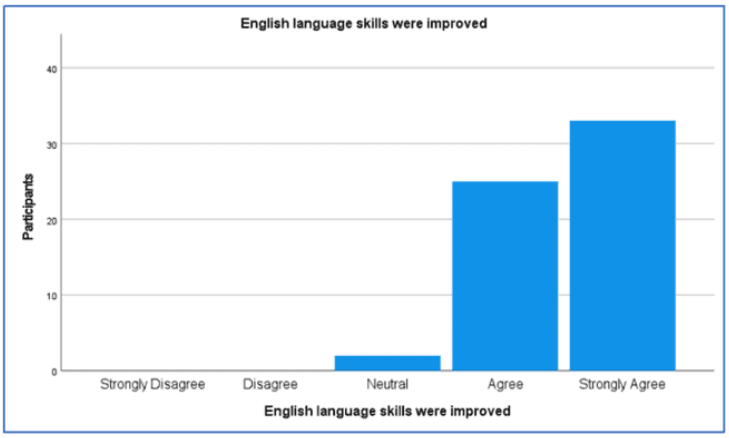

Figure 3. English Language Skills Were Improved

Moreover, motivation emerged as an important factor influenced by the gamified lessons. As illustrated in Figure 4, the majority of participants reported feeling highly motivated when engaging with gamified lessons. These findings stress gamification's potential to create a more engaging and interactive learning environment, which can drive student participation and sustained interest in English language learning.

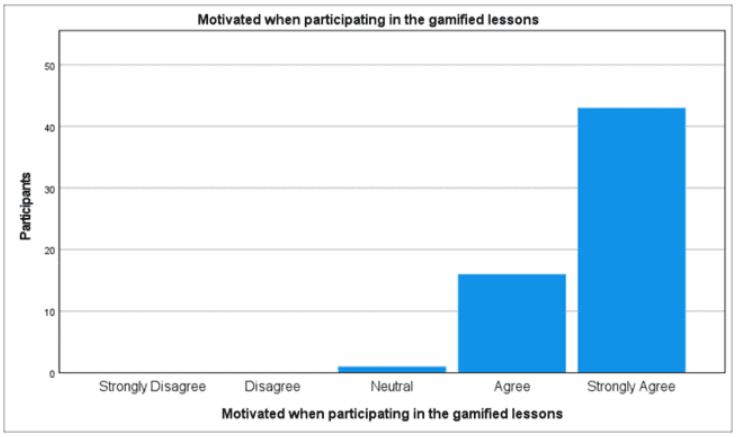

Figure 4. Motivated When Participating in the Gamified Lesson

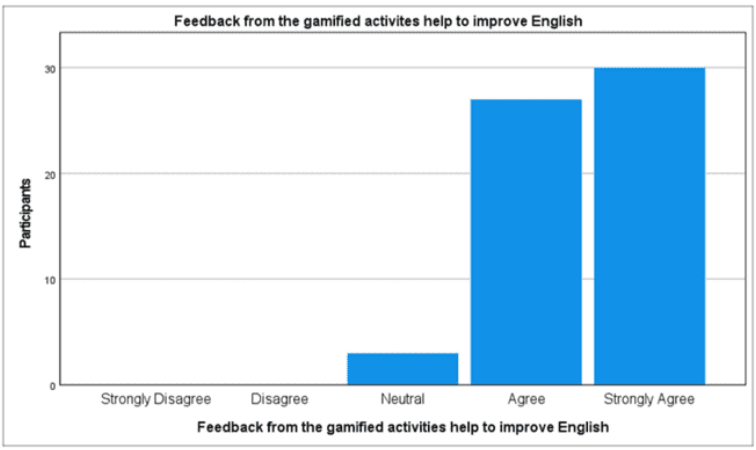

Figure 5. Feedback From the Gamified Activities Helps to Improve English

The findings from the survey further demonstrated the learners' preference for gamified lessons over traditional teaching methods. As shown in Figure 5, a majority of participants expressed a clear inclination towards learning English

through games rather than conventional approaches. Over 30 participants strongly agreed with this preference, forming the largest group in the survey. Approximately 25 participants agreed, further supporting the trend toward favouring gamified learning. Only a negligible number of participants remained neutral or disagreed, highlighting a positive reception of gamification. These results suggest that gamified lessons not only improve students' engagement and motivation but also address their preferences for interactive and dynamic learning methods over traditional classroom approaches.

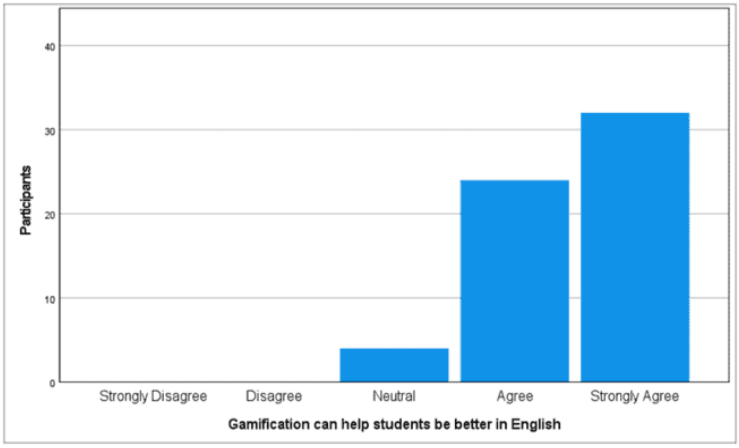

Figure 6. Gamification can Help Students Improve in English

Findings also reflect participants' belief in the effectiveness of gamification in improving their English language skills. As illustrated in Figure 6, a significant proportion of participants agreed or strongly agreed with the statement that gamification can help them improve in English. More than 30 participants strongly agreed with the statement, demonstrating strong confidence in the role of gamified activities in enhancing their proficiency. About 25 participants agreed, further supporting the effectiveness of gamification in language learning. A minimal number of students remained neutral, with no participants disagreeing or strongly disagreeing. This overwhelming positive response suggests that the gamified learning approach is not only enjoyable but is also perceived as highly effective for skill development in English, especially among B40 students.

D. Interview

Six main themes were identified: emotional and psychological engagement, motivation through innovative learning, academic skill enhancement, social and collaborative learning, future-oriented learning, and challenges and growth opportunities. The themes and codes are illustrated in Figure 7. These findings highlight how gamification served as a powerful tool to encourage language skill development among B40 students.

(a). Emotional and Psychological Engagement

The findings indicate that gamification significantly boosted the emotional and psychological engagement of B40 students, fostering a positive outlook on learning English. Participants became more comfortable using the language, with three expressing that they "can speak" and preferring to use English, as it was the first language they acquired. Others, who initially lacked confidence, acknowledged that English was not their first language since it was not commonly spoken at home. Additionally, students exhibited increased confidence in speaking English, showing a willingness to communicate despite making mistakes. One participant stated, "I will try my best to speak in English," demonstrating their determination to improve. Gamification also elicited positive emotional responses, as students expressed feelings of happiness and excitement and recalled memorable lessons. For instance, one participant found the lesson on the holy festival particularly impactful, saying, "I can't forget the holy festival".

(b). Motivation Through Innovative Learning

The analysis found that students were highly engaged by gamification features, particularly sound effects like music and drumrolls, which aided in information retention. One participant recalled, "I can't forget… I was the first in the future and solar system," while another emphasized, "I can't forget the holy festival." These elements made the lessons more engaging and memorable. Students expressed a strong preference for gamification as a learning method, appreciating the combination of fun and education. One participant noted, "We play, but we can also learn things," indicating that the interactive approach was both enjoyable and effective. The excitement generated by gamified lessons also enhanced vocabulary retention, with students recalling words such as "summer," "Earth," "colour," "Jupiter," "camouflage," and "Galaxy. "In summary, gamification served as a powerful motivator, transforming the learning experience into an enjoyable and interactive process. By capturing students' attention and improving information retention, this approach fostered enthusiasm for learning and strengthened their grasp of the English language, making it an effective instructional strategy.

(c). Academic Skill Enhancement

This study aimed to enhance the reading and speaking skills of B40 students through gamified lessons. The gamified lessons resulted in notable improvements, boosting students' confidence in these areas. One of the participants said that "Reading can make me calm," while another expressed their newfound passion, saying, "I love reading." Students also found the effectiveness of games in improving their English skills. One participant reflected on their progress, stating, "Yes, before my English was TP4, now my English is TP5," indicating an advancement in language proficiency. Overall, the findings demonstrate the transformative impact of gamified learning on students' reading and speaking abilities. By making learning enjoyable, motivating students, and fostering measurable progress, this approach proves to be an effective tool for enhancing language skills and building confidence.

(d). Social and Collaborative Learning

Beyond motivation and engagement, Students opined that peer support is a crucial factor in their learning process. They frequently communicated in English while collaborating on tasks. One participant stated, "I speak English to my bestie," emphasizing how peer interactions facilitated language. Collaboration was a common theme in the interview data as students discussed strategies before answering questions. One participant noted, "Yeah, I discuss strategy first, then press the answer," highlighting the role of teamwork in problem-solving. Moments of success were celebrated, with another student recalling, "I was very happy when I won the first game, and I shared great teamwork with my partner." Participants asserted that healthy competition further enriched the learning experience, strengthening peer relationships. One student commented, "Yeah, because I get to know them better," underscoring how gamification fostered social connections.

Additionally, participants applied their learning to real-life situations, reinforcing the relevance of their lessons. For example, some mentioned learning practical skills like counting money, stating, "Teacher, I learned how to count money," while others showcased improved vocabulary by recalling words like "yoghurt" and identifying colours.

Participants also revealed curiosity about broader topics such as the solar system, eagerly recalling terms like "astronaut," "the Sun," and "the Earth." These findings suggest that gamification not only enhanced language skills but also sparked interest in new subjects, making learning more meaningful and applicable to real-world contexts.

(e). Future-Oriented Learning

The analysis revealed that participants viewed English as an essential tool for their academic and professional success, recognizing its role in global communication. One participant observed that, "Throughout the world, like 80% of the people know English, so it's easy to communicate," while another remarked, "If everyone knows English and you don't, you will feel shy." These statements illustrate how participants linked English proficiency to their social confidence and ability to integrate into global communities. Many participants associated English proficiency with their career aspirations, expressing ambitions such as "I wanna be a teacher," "I wanna be a scientist," and "I wanna be a police officer." Their responses highlight their understanding that mastering English can open doors to various professional opportunities. The students acknowledged the importance of English in international contexts. One participant stated, "When we go to the USA or Britain, we can use English," while another noted, "At university, we have to speak English all the time." This future-oriented perspective underscores the role of gamified English learning in preparing students for academic and professional success.

(f). Challenges and Growth Opportunities

The study also identified challenges faced by students during gamified learning and how they addressed them. One common difficulty was maintaining focus and following instructions, with participants acknowledging the need to stay attentive. One student stated, "Focusing" and "Listening to what the teacher says" were key to keeping up with lessons. Another limitation was the frustration of selecting incorrect answers. One participant expressed, "When we know the answer but press the wrong one, we feel very angry." While this emotional reaction highlights the competitive nature of gamification, it also motivated students to improve, as another noted, "I must work harder." Some students also struggled with spelling, humorously referencing "the yoghurt" as a challenging word. In response, a few adopted trial-and-error strategies, with one admitting, "For me, I just pick a random answer".

Despite these difficulties, students appreciated the support provided by their teacher. One participant stated, "Teacher helped," highlighting the role of guidance in overcoming obstacles. These findings suggest that while gamification presents certain challenges, it also offers opportunities for growth. The ability to persist through difficulties, develop resilience, and receive teacher support contributed to students' overall progress. Addressing these challenges effectively can further enhance the benefits of gamified learning in language education.

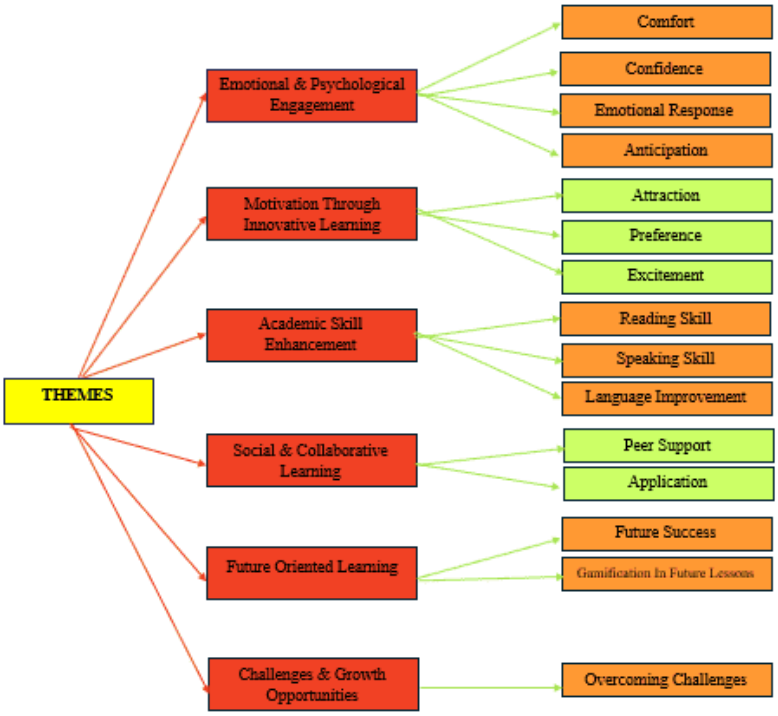

Figure 7. Themes Derived From the Interview Data

IV. Conclusion

This study found a marked improvement over the eight-week intervention in the students' reading comprehension and speaking fluency. These findings suggest that gamified lessons can be a worthwhile pedagogical tool to enhance language skills, particularly among B40 students who may benefit from more interesting and motivating educational strategies. León et al. (2022) reported that reading skills of students can be enhanced by gamification. As stated in their study, due to their drive and dedication to studying, young students are often interested in using play tactics to enhance their reading habits. Students who use gamified systems increase their vocabulary, reading speed, problem-solving skills, and study habits. The current study proved that the participants' speaking scores showed significant improvement, thus supporting the success of the intervention. The participants showcased better speaking abilities, which simply highlights the positive impact of the gamified intervention implemented to enhance the B40 students' speaking skills. Therefore, we can conclude that the intervention not only led to a statistically significant increase in speaking scores but also produced a practical and meaningful improvement in participants' speaking skills. The results are consistent with existing literature (Vathanalaoha, 2022), which emphasizes the potential of gamification to create a more dynamic and immersive learning experience, thereby enhancing overall educational outcomes, which are further discussed below.

This study reported that the use of gamification in education has shown a significant improvement in students' motivation. For B40 students, who frequently battle with low self-esteem and a fear of being judged in academic contexts, this change was essential. Vathanalaoha (2022) found that gamification is a means of addressing the problem of low student motivation. Gamification aids teachers in improving students' attention spans and motivation, thus increasing students' participation in class activities (Kıyançiçek & Uzun, 2022). Playing a game together in class goes beyond the conventional method of instruction, which directly boosts motivation to learn a language (Kıyançiçek & Uzun, 2022).

Implication of the study

Teachers play a pivotal role in implementing gamified learning strategies within classrooms. The findings of this study suggest that educators can incorporate diverse gamified activities in their lessons. These activities can improve learners' engagement with English language reading and speaking tasks by making them fun, competitive, and interactive. Moreover, teachers can customize gamification for learning objectives and design tasks tailored to specific language skills. For instance, using collaborative games for speaking practice or timed reading challenges to develop reading fluency.

Moreover, gamified tools often provide data analytics that teachers can use to track students' performance, identify areas for improvement, and offer targeted support. Lastly, by rewarding students with badges, points, or certificates, educators can foster a sense of achievement and encourage consistent effort. Through gamified methods, educators can create a positive and engaging learning environment, especially for students who may lack intrinsic motivation or face difficulties in traditional classroom settings.

The current study also underscores the necessity for schools and policymakers to take proactive measures in integrating gamification into educational frameworks. Schools should allocate resources to adopt gamified learning platforms and provide students with access to digital tools, such as tablets, educational apps, or smartboards. Affordable technology is essential to bridging the digital divide faced by students from underprivileged backgrounds. Next, policymakers should design professional development programs to equip teachers with the skills to effectively use gamification in their teaching. Workshops and hands-on training sessions can ensure educators are confident in implementing these methods. Policies that prioritize equitable access to gamified resources in rural and urban schools can help reduce educational disparities.

The result of this study suggests that the use of gamification helps in enhancing the English language reading and speaking skills of B40 students. This is to say that gamification can be used as a tool to upskill the reading and speaking skills. Policymakers should consider using gamification in schools with a majority of B40 students, as it could leave a positive impact on their English language learning, as well as bridge the educational gap among them. The theoretical and practical implications of this study are discussed in detail below.

The current study advances the theoretical knowledge of gamification in education, especially as it relates to B40 students' English language acquisition. The study supports and expands upon three important ideas by looking at how they affect speaking and reading abilities as well as motivation: goal-setting theory, Stephen Krashen's theory of second language acquisition, and self-determination theory (SDT). Figures 8 and 9 illustrate the theoretical implications of the findings of this study.

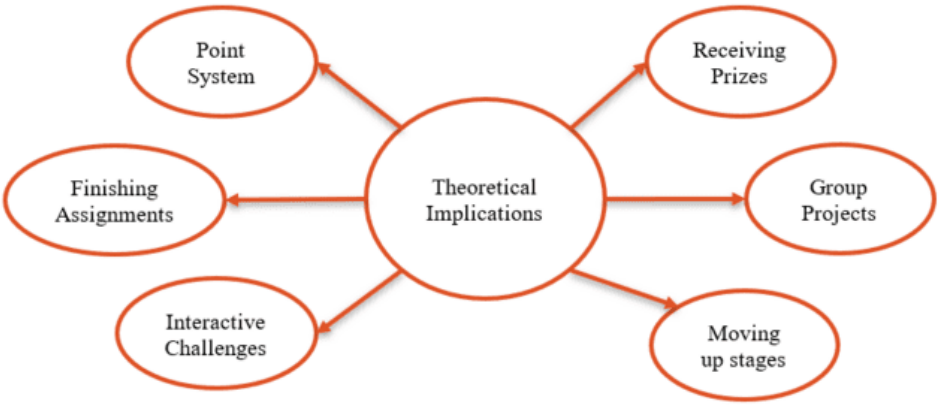

Figure 8. Theoretical Implications

Figure 9. Practical Implications

This study highlights the significant potential of gamification as an innovative approach to addressing educational inequalities. By fostering motivation and improving English language reading and speaking skills, gamified learning can empower B40 students to achieve better academic outcomes. The findings call for a concerted effort from educators, policymakers, and researchers to leverage gamification in creating more inclusive and effective educational experiences. Ultimately, this research contributes to the growing body of knowledge on gamification and its transformative role in language education. One of the key limitations of this study is the relatively small sample size, as the research was conducted in one research site with a limited number of students. Another limitation of this study is the relatively short duration of the gamified intervention. The intervention lasted for only 8 weeks, which may have restricted the ability to assess the long-term impact of gamification on students' language skills. Future research should consider conducting longitudinal studies to assess the long-term effects of gamification on students' language proficiency. While this study

demonstrated positive short-term outcomes, understanding whether the improvements in reading and speaking skills are sustained over time would provide valuable insights into the lasting impact of gamified learning.

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