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The Effects of Teaching Presence on Students' Motivation and Performance in A Long-term Online Gamified EFL Listening Course

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Studies have proven that gamification in learning can increase motivation and engagement, however, since the pandemic broke out and instruction was held fully online for a long time, its effectiveness has been under question. The motivation was also reportedly decreased in long-term gamified classes. Nonetheless, in gamification research, teaching presence (TP) as the predictor of success in distance instruction has not adequately been included. The study investigated the effects of TP on students' motivation and performance in a long-term online gamified EFL listening class. Teaching Presence and eMUSIC motivation framework were used to guide the research. A mixed-method with quasi-experimental design and thematic analysis was employed to mine quantitative and qualitative data respectively. Two groups of treatment and control of 42 freshmen, 28 females and 14 males aged 17-19 taking Listening for General Communication 2 were involved in the study. Independent samples t-test and one-way repeated measures ANOVA by SPSS 27 were used for the analysis of quantitative data; meanwhile, thematic analysis with NVivo 12 was used for the analysis and interpretation of qualitative data. The study revealed that TP was relatively able to maintain students' motivation and enhance performance in a long-term gamified EFL listening class. The findings recommend similar research focusing on three other language skills and Caring subscale of eMUSIC motivation.

Keywords: distance instruction, gamification, eMUSIC, one-way repeated measure ANOVA, teaching presence, EFL

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INTRODUCTION

Remote learning admittedly offers abundant advantages like time-saving (Torres and Cruz, 2022, p. 83), and access to a wide range of materials (Gahramanova, 2021, p. 25), however; in the long run, education can deeply suffer from learning loss (Engzell et.al., 2020). Learning loss refers to the loss of knowledge and skills or to setbacks in academic progress, mainly due to extended gaps or discontinuities in a student's education (Dickler, 2021). The main barrier to remote learning is the separation of the students and the students from each other. This separation often results in a lack of retention and the feeling of isolation, particularly among students. This feeling is the main source of students' dissatisfaction in online learning environment (Berry, 2019). Another drawback of online learning is difficulty to stay motivated (Wieczorek et al., 2021). Online learning necessitates excessive instructor involvement to tap students' motivation and self-control (Klisowka et. al, 2021). Lack of engagement and support from instructors, peers, and parents leads to weakening motivation among students (Kanellopoulou and Giannakoulopoulos, 2020, p. 143) that can result in lessening achievement. Ertem and Arı (2022) confirm a positive relationship between motivational persistence and achievement orientation. In short, the keyword in the success of online learning is how an instructor establishes students' engagement with the instructor, peers, and content to maintain their motivation. But in any case, engaging students who are miles away requires a new set of teaching strategies.

Teaching Presence

The strategies to achieve the aforementioned are mainly referred to a framework called teaching presence (TP). TP is defined as the design, facilitation, and direction of [student] cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcome (Garrison et al., 2001); it is a virtual "visibility" of an instructor in a virtual learning environment (Baker, 2010). TP is the main predictor of student success in online learning (Marks et. al., 2005; Means et. al, 2014); Purwandari et. Al., 2022), therefore, strong TP is vital for accomplishing deep and meaningful learning outcomes (Garrison and Cleveland-Innes, 2005, p. 133). TP encompasses three separate elements: instructional design and organization, facilitation of discourse, and direct instructional activities. Instructional design and organization comprise activities like locating and building curricular materials, sequencing lessons, and assignment procedures and assessment criteria. Facilitating of discourse is regularly monitoring, guiding, and providing feedback or comments on students' work, assignments, and posting to preserve their interest, motivation, and engagement. The instructor also has to model types of students' contributions. And direct instructional activities necessitate the instructor to direct cognitive processes by providing intellectual and scholarly leadership. An instructor has to confirm students' understanding, help students correct misconceptions and offers resources (Garrison et al., 2019)

TP in EFL instruction, especially listening, is rare to find. This is probably since TP is largely accepted for all disciplines. This means that when discussing online learning in various disciplines, it will generally apply to English learning. Only one research by

Preece and Bularafa (2015) reported that TP enhanced listening skill. However Naghdipour and Manca (2022) confirm that TP is more crucial in EFL contexts since it can provide exposure to adequate linguistic input and facilitate interaction, feedback, and knowledge creation or sharing.

Gamification

Another one that is growing rapidly is the use of gamification in learning including in the learning of language skills. Gamification is not a game application, but the use of game-based application components and game principles in a non-game context (Shahri et. al., 2019). It is believed to be the answer to building engagement because of several advantages, among others, increasing student engagement (Costello, 2022, p. 141),enhancing knowledge absorption and retention (Brull et. al., 2017), and promoting cooperation, teamwork, communities of learners and practice (Dichev and Dicheva, 2017; Zhao and McClure, 2022). Then, the study by Yildirim (2017, p. 86) reveals that gamification positively impacts achievement and behavior against learning objectives. Calderón et al. (2018, p.238) posit that gamification is essential since it employs game elements to empower productivity and promote engagement and motivation.

In language education, the purpose of gamification is to enhance language learning (Flores, 2015). In similar vein, (Al-Dosakee and Ozdamli, 2021, p. 559) stated the main purpose of incorporating the gamification concept into the language learning process is to boost students' motivation, engagement, and integration with learning materials, instructions, and exercises, which can be a tedious endeavour for certain students. Studies in language learning reported that gamification is beneficial in developing engagement and participation in language class (Cahyani, 2016), can improve students' enthusiasm and increase their motivation, (Sevilla-Pavón and Haba-Osca, 2017), and turns the learning and teaching of a new language into an enjoyable process (Rego de Andrade, 2019, p. 991). Numerous tools and platforms have applied teaching and learning language to enhance the learning process by increasing learners' motivation and engagement like Kahoot, Dualinggo, Coursera, and Memrise

Some studies reported the effects of gamification on language skills. In writing, gamification can lower writing anxiety levels of EFL students (Yavuz et. al., 2020), meanwhile study by Laffey (2022, p. 23) showed no significant difference in EFL writing outcomes between control and treatment groups. Additionally, El Tantawi et. Al (2018, p. 15) found that academic writing performance and motivation were improved, but negative attitude toward writing decreased through gamification, In reading, Freiermuth and Ito, (2022) reported that their students were motivated by the activities through reflection on their book's content and through the sharing of specific details. Thuy and Hung (2021, p. 81) found an indication of positive impact in teaching speaking to young learners. Then, another study by Ahmed (2021, p. 21) showed that gamification had a positive impact on developing EFL speaking skills and increased the motivation of the participating students. As a matter of fact, there is no report of the research on the effects of gamification on EFL listening.

Notwithstanding numerous reports of the advantages of gamification in education, the report of the disadvantages needs to be taken into account. Out of 5038 papers reviewed from ACM Digital Library, Google Scholar, IEEE Explore, and Science Direct databases, Dichev and Dicheva (2017) reports that the outcome of application of gamification is 64% inconclusive, 26% positive, and 10% negative. Christy and Fox (2014, p.66) reveals that some research shows uncertainty or harmful effect of gamification. They disclosed that ranking affects females in various ways and may lead to unpredicted reverse impacts. In addition to not improve the result, gamification decreases enjoyment and motivation (Hanus and Fox, 2015, p.152). In general, studies claiming favourable outcomes from a specific combination of game elements do not aid comprehension of the combination's causal influence, as it is unclear if the combination or an individual element was responsible for the positive outcome (Jang et. al., 2015, p. 246). Incorporating badges, leader boards, virtual coins, and pseudonyms into a communication course can have a negative impact on students' motivation, contentment, and empowerment, thus it is important to grasp the boundaries of gamification (Hanus and Fox, 2015).

As online learning is getting more popular, criticism over the effectiveness of gamification in enhancing engagement and motivation in virtual learning environment comes to fore. Hanus and Fox (2018) mentioned that students' intrinsic motivation is declined in long-term gamification experience. Its effect on motivation or participation is lower than expected (Mulcahy et al., 2018; Tan, 2018). Meanwhile, the barriers to maintaining participation in online gamification are time limitations, boredom due to lack of social interaction, repetitive activity and unsuitable level of difficulty (Mahmud et. al., 2020a). Hence, the competition element in gamification should be designed to be capable of offering ideal challenges for the students.

Empirical studies of gamification with mixed results should be openly aware of what kind of circumstances gamification is either carried out or avoided. A study by Mahmud et al., (2020b) showed that gamification alone was less effective, but incorporating it with TP yielded significant outcome in enhancing students' social connectedness. The conditions elaborated above and no report of research on EFL listening had driven the researcher to furtherly study that effect in a long-term online gamified EFL listening course incorporated with TP. The study strived to answer the following research questions:

1. What effects does TP have on students' performance in a long-term online gamified EFL listening course?
2. To what extend can TP maintain students' motivation in a long-term online gamified EFL listening course?
3. What are students' perceptions of the use of TP in a long-term online gamified EFL listening course?

METHOD

Research Design

The study employed a mixed-method where quantitative as the main approach to answer the research questions meanwhile qualitative supported and confirmed the findings. For quantitative approach, the study utilized a quasi-experimental design. The design was suitable as the study attempted to figure out the causal effect of policy intervention or what would happen without the intervention (Gopalan et.al., 2020). Besides, the design does not necessitate random assignment to the population (Mahmud et. al., 2020a). A total of 42 participants, 28 females and 14 males, aged 17-19 taking listening course in one of Indonesian Universities were involved in the study. Quantitative data were collected through questionnaire of MUSIC model of motivation inventory for college students (Jones, 2022). This inventory has been validated in Jones et. al., (2021); Miyazaki, et. al. (2022); and Wilkins et. al. (2021). The questionnaire consists of 26 items scored on a six-point Likert response scale ranging from 1 (strongly disagree) to 6 (strongly agree). Data that could serve as both quantitative and qualitative were retrieved from SPOT data analytic, assignments, and discussion forum. Qualitative data were mined from open-ended virtual interviews. The findings may provide a reference from which causal effects can be estimated.

The study was initiated with pre-research procedure that covers review of literature, instruction design, gamification preparation, LMS preparation (embedding course outline, learning materials, weekly assignments, topics for discussion forums, quizzes, tests, etc.), pre-test and post-test, MUSIC model motivation, and decision of treatment and control groups.

Procedure

As the participants came from two classes, they were then grouped into treatment and control without random assignment. To confirm the validity of the study, participants in the two groups took pre-test on listening to find out their initial listening ability and on motivation subscales (eMUSIC) to know their initial motivation level. It is essential that two groups were at the same level of listening performance and motivation at the departure of experimental research. Independent T-test was then administered to ensure the homogeneity of the two groups.

MUSIC Model of Motivation

Jones (Jones and Skaggs, 2016) developed the MUSIC Model of Motivation as a research-based model to explain the relationship among elements that influence people's motivation to participate in activities such as courses and class assignments. The MUSIC model is a conceptual framework for five categories of teaching strategies critical to students' motivation based on research and theory. In this model, people’s motivation to involve in activities are influenced by five insights (eMpowerment, Usefulness, Success, Interest, and Caring), which work together synergistically to build a good motivational atmosphere. These five insights are abbreviated as MUSIC. Students are more motivated when they believe they are empowered, when they believe

the content or activities are useful, when they believe they can succeed, when they are interested in the topic or activities, and when they feel cared for by others in the learning environment, according to the five key principles of the MUSIC model (Jones et.al., 2022). The research made use of this model mainly because it comprises five well-established motivational constructs that have been studied over decades and used worldwide. This model is also applicable in L2 instruction (Jones, 2020)

The MUSIC model includes five key principles that instructors need to consider when designing instruction as shown in the figure 1 below.

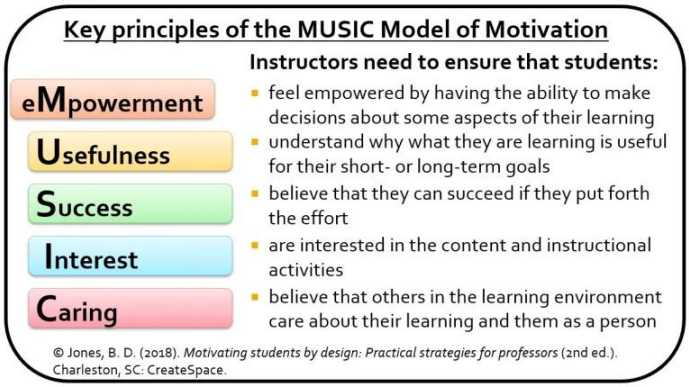

Figure 1
Key principles of the MUSIC model motivation

Context

The cohort of the study was two classes of freshmen of the English Education Study Program taking Listening for General Communication 2. As it was a pandemic situation, the classes were completely held online and mostly synchronous using Zoom. All synchronous sessions were recorded by the operator. Course outline and learning materials like e-books, video and audio lessons, quizzes, tests, etc. were embedded on SPOT (the university's integrated online learning system/learning management System) prior to commencement of the course. Videos and audios for the discussion forum were provided in the form of URL links. All learning materials, tests, quizzes, assignments, and discussion forums were scheduled in the system so that they were timely accessible to the students. All quizzes, tests, and assignments were also submitted through the system. The instructor and students met virtually once a week from January to May (16 sessions) to discuss the topics scheduled in the course outline. As scaffolding activities and to provide adequate exposure to L2, listening in particular, the students had to do assignments and actively participate in a discussion forum where both of which required them to watch videos or listen to audio embedded on LMS.

Assignment

The students had to submit weekly assignments which were designed to scaffold classroom practices. Those students were given five days to finish each assignment but

were strongly encouraged to finish it as soon as possible. They were not given scores based the quality but on punctuality or speed to submit each assignment. The LMS provides precise data regarding time from the smallest, second, to the biggest, date. However, for this research, the report is on daily bases.

Discussion Forum

Participants were assigned to actively participate in a discussion forum. To expose them to listening in L2, they had to watch videos or podcasts embedded on the internet. As they are prospective English teachers, the topics for the discussions were mostly around education issues in general and teaching English in particular. A topic was available for a week, started on Mondays and ended on Saturdays. Every Monday, a new topic was released. This forum took place for 14 weeks, from 2nd to 14th week of the semester.

They were scored based on activeness (frequency) and participation quality (thoughtful or in-depth answers). Frequency, in this case, is how often a participant wrote in the discussion box to put forward or respond to others' statements or views, on the other hand, quality is how good the statements or views were. A rubric was used as scoring guidance to score quality. Finally, the discussion forum score was calculated as frequency times 30% + quality times 70%. Quality was weighted higher since the participants, to come up with qualified responses, had to learn more, made observation or research prior to participating in the forum. They were also allowed to create new threads. Active participants were awarded 5 points added to the contribution score. The fastest participant to respond to a new thread and the student with the best idea were awarded extra 5 points and a badge each.

Prior to the study, the participants from two groups were briefed about the research and their consent, and at the same time, the course objectives, course conduct, class activities, assessment, and grading policy. They were informed that they had to work hard for their final mark by adhering to class rules. They would be scored not only for their achievement in tests or quizzes but also their attitudes during the semester like punctuality submitting assignments but also active participations in class activities. By doing so, they could be awarded badges or trophies and extra points added to contribution score. The badges and trophies could help them in the final consideration of marking.

As shown in the figure above, different procedures were applied to the treatment and control groups. In treatment group, the instructor actively provided facilitation and direction in learning process like sharing leader board ranking, routinely announcing badges, trophies, and extra point awardees, and facilitating discussions in discussion forum and during breakout. The instructor also provided timely feedback and commentary to students' activities and works. Conversely, in control group, the instructor was passive; active facilitation and direction were absent even though the students had to do and submit assignments on time and take active part in the discussion forum.

Listening pre-test and post-test were administered to both groups at the beginning and the end of the study. At the departure was to find out the groups' homogeneity and at the

end to compare the groups' achievement. However, students' motivation were measured three times (repeated measure), at the beginning, in the middle (week 8), and at the end (week 16) to find out how motivation changed over time in both groups.

When it was through with the post-test, five students from each group were interviewed. The purpose was to see their perceptions on their learning experience in gamified Listening for General Communication 2. The interviews were Zoom mediated lasting for about 40 minutes each and set to be informal. The interview were open-ended as it provides a profounder insight into the interviewees' thought, feelings, and behaviour, and provides various implications based on varied answers of the participants (Zeigler-Hill and Shackelford, 2020).

Data Analysis

To answer two research questions as the chief objectives of the study quantitative analyses were employed. Independent sample t-tests were used to know listening performance and the level of motivation they had and also to ensure the two groups' level were not significantly different at the departure of the study. Analysis of paired samples test for listening pre-test and post-test was conducted to measure the changes in listening performance at the end of the semester. Meanwhile, eMUSIC motivation was measured three times—at the first, eighth, and sixteenth week during the semester and analysed through one-way ANOVA repeated measures. Repeated measures were taken to both groups to discover how students' motivation changed over time in the treatment group with teaching presence and control group without. The analyses of measurements were assisted with SPSS version 27. Quantitative data from SPOT analytic information regarding submission time of assignment and activeness in the discussion forum were also analysed. The result of the analyses was then visualized for easier interpretation.

The third research questions as secondary purpose, qualitative data analysis was taken to disclose students' perceptions of their learning experience in their gamified listening course during the semester. Thematic Analysis (TA) was used to identify patterns that provide an answer to the research question addressed. TA is a flexible way data analysis that permits researchers with different methodological background (Lochmiller, 2021). TA is a virtuous approach to research where a researcher strives to discover people's views, opinions, knowledge, experiences or values from a set of qualitative data (Braun et. al., 2022). The interview data underwent the process of familiarization, coding, generating themes, reviewing themes, defining and naming themes, and writing up Most process of qualitative data analysis made use of NVivo 12.

FINDINGS AND DISCUSSION

Quantitative Data

The first quantitative analysis was homogeneity to ensure that the two groups were similar prior to study. Independent t-test to the treatment and control group showed that they were considered not significantly different (homogenous) with t value 0.07112 and p value .47, not significant at $p < .05$. Similarly, five components of motivation of the two classes were also homogenous with various t and p values as depicted in table 1.

The result of the test indicated that the two groups were at the same level of both listening performance and motivation at the point of departure of the study. This condition was essential to know how much the two group changed over time as a result of different treatments.

Table 1
Independent T-test: Pre-test, listening and MUSIC model of motivation

Domain			n	Mean	S. dev	t	p
Listening		Treatment	20	74	12.45	0.07112	.471829
		Control	22	73.73	12.40		
eMUSIC	eM	Treatment	20	5.30	0.28	-0.30827	.379738.
		Control	22	5.34	0.46		
	U	Treatment	20	5.59	0.26	1.48224	.073056
		Control	22	5.42	0.46		
	S	Treatment	20	4.91	0.55	-0.75884	.226199
		Control	22	5.05	0.58		
	I	Treatment	20	5.2	0.36	0.2595	.398289
		Control	22	5.22	0.3		
	C	Treatment	20	5.5	0.27	-1.22669	.113556
		Control	22	5.6	0.26		

The first research question sought to examine the effect of TP on students' performance in a long-term online gamified listening class. As identified in table 4, Paired sample T-test for pre-and post-test shows that improvement of listening achievement is evident at significance .042 < .05. On the other hand, control group has a significance .369 which is higher than .05 that means there is no significant differences between mean of pre-test and post-test.

Table 2
Paired samples test for listening pre-test and post-test

		Paired Differences							
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	Pre-Test Score for Treatment Group - Post-Test Score for Treatment Group	-6.10	12.52	2.80	-11.96	-.24	-2.178	19	.042
Pair 2	Pre_test Score for Control group - Post_test Score for Control Group	-1.18	6.04	1.29	-3.86	1.49	-.918	21	.369

The differences between treatment and control groups is also visualized in the boxplot (figure 2). It shows that the mean of listening test scores is relatively equal at the beginning of the semester, however, at the end of the semester they are significantly different--treatment group's mean score is higher than that of the control's.

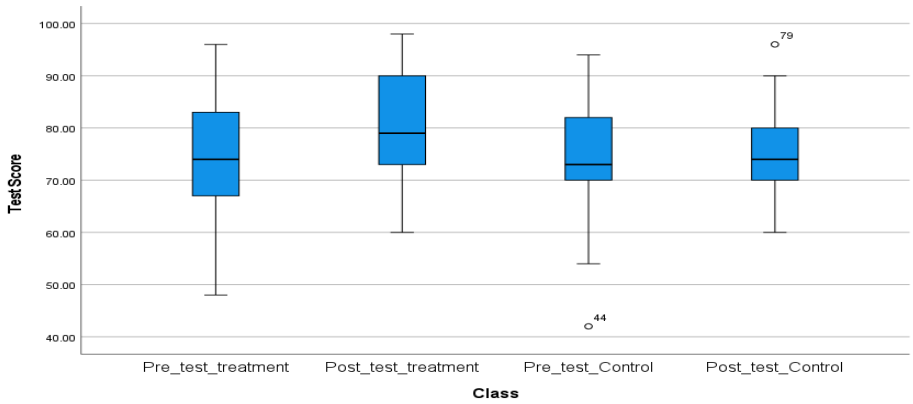

Figure 2
Boxplot paired sample t-test

The statistic above indicates that the differences in the performance might have resulted from the application of TP in the treatment group. In other words, TP is evident in enhancing participants' performance. It also implicates that in a long-term online class, gamification alone is not enough. The interviews to five participants in control group revealed that they were actually enthusiastic at the beginning of the semester not only due to gamification but also desire to get A in the course. When direction and feedback were inadequate, they did not know what to do. They mentioned that at the beginning of campus life, they were not accustomed to self-regulated learning. They admitted that it was hard for them during the pandemic. Most of them had neither been to campus physically nor met their classmates in person. Additionally, the repetitive game had resulted in boredom and eventually weakened their interest after a few weeks. This finding corresponds to (Hanus and Fox, 2015b) that students' intrinsic motivation is declined in long-term gamification experience and (Mahmud et al., 2020b) that online gamification solely is not effective. The differences of treatment from control group in listening performance at the beginning and the end of the study is depicted in figure 2.

Research questions 2 is related to changes in motivation in the treatment and control groups whether or not and to what extent TP can maintain students' motivation over time in long-term gamified EFL listening course measured in terms of empowerment, usefulness, success, interest, and care (eMUSIC). The measurement took place three times, at the beginning, in the middle, and at the end of the semester using one-way repeated measures ANOVA The measurement was also carried out by analyzing analytic data from SPOT regarding time needed to finish and submit weekly assignments and quantity and quality of contributions in discussion forum.

Empowerment

Table 3 shows the result of repeated measures to the first eMUSIC motivation subscale, eMpowerment. Paiwise comparison of treatment reveals mean difference of first to second measures is .110, and second to third is .180, .290 points altogether from the

beginning to the end of the semester with sig .000 or <.05. Similarly, this subscale has significant decrease to control group .536 points from first to second measure and .373 from second to the third, or .909 altogether. This statistic means that there is a significant decrease in eMpowerment subscale to both treatment and control groups, however, the decrease in control group is much higher than that of treatment group.

Table 3
Pairwise comparisons for empowerment measure

Treatment						
(I) factor1	(J) factor1	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b] Lower Bound	Upper Bound
1	2	.110*	.023	.000	.062	.158
	3	.290*	.045	.000	.197	.383
Control						
1	2	.536*	.075	.000	.381	.692
	3	.909*	.074	.000	.755	1.063

*. The mean difference is significant at the .05 level.

The decrease might have been the result of the absence of TP in control group. This implicates that TP has significant impact on empowerment. The result of the study incriminates that in a long-term gamification, students' motivation decreased over time. Teaching Presence were unable to maintain students' first motivation subscale—empowerment, though, the effect of the absence of TP was worse. Therefore, even though it could not completely maintain this motivation subscale, TP could minimize or slow down the decrease. This finding is consistent with (Mahmud et al., 2020a) that TP can sustain motivation and engagement in long-term gamified environment.

Usefulness

With respect to the second subscale of MUSIC motivation, Usefulness, the mean decreases .010 after eight weeks and .080 from week 8 to week 16, making up 0.090 from the beginning up to the end of the semester. As identified from table 6, after 8 weeks the sig. is .722> .05 that means the decrease is not significant, or no usefulness subscale decrease in the first eight weeks, yet, after the second haft (week 16), there is a decrease with the significance .035 which is <.0.05, or the decrease is significant. However, if the level of significant were at .01, the decrease would not be significant. The finding implicates that Teaching Presence is able to maintain students' Usefulness subscale of MUSIC motivation, but in the long run, there is a tendency that this motivation subscale would decrease over time.

Table 4
Pairwise comparisons for usefulness measure

Treatment						
(I) factor1	(J) factor1	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
					Lower Bound	Upper Bound
1	2	.010	.034	.772	-.061	.081
	3	.090*	.040	.035	.007	.173
Control						
1	2	.027	.033	.418	-.041	.096
	3	.218*	.070	.005	.074	.363

*. The mean difference is significant at the .05 level.

The table shows that in control group, the mean decreases .027 in eight weeks which is insignificant and .191 in another eight weeks, which is significant. Usefulness subscales of motivation are different from the beginning, treatment's is 0.7 higher than that of control and both decreases over time, however, control group's decrease is much higher particularly after eight weeks. This finding implicates that Usefulness subscale would somehow decrease over time regardless the existence or the absence of TP, but the application of TP could limit the decrease.

Success

Success subscale of MUSIC motivation also experienced a decrease to both treatment and control groups with different degrees. Treatment group's mean decreased 0.10 in the first eight weeks and 0.87 in another eight weeks with significance .046 and 0.27 respectively, likewise, control group decreased 0.341 and .216 in the first and second eight weeks with the significance .000 and .001 respectively. This statistic shows that both treatment and control groups experienced significance decrease in Success subscale of MUSIC motivation regardless application of TP. As seen from table 5 below, however, the decrease of treatment is much lower with mean difference 0.188 at the end of the semester compared to that of control group with 0.557. This finding indicates the effect of TP which could relatively maintain students' motivation of this subscale until the end of the semester compared to the absence of TP.

Table 5
Pairwise comparisons for success measure

Ttreatment						
(I) factor1	(J) factor1	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
					Lower Bound	Upper Bound
1	2	.100*	.046	.042	.004	.196
	3	.188*	.065	.010	.051	.324
Control						
1	2	.341*	.081	.000	.171	.510
	3	.557*	.104	.000	.341	.773

*. The mean difference is significant at the .05 level.

Interest

In Interest subscale, both treatment and control groups also experienced decrease, however, as identified from table 6 below, the gap of the decrease between the two is wide. On the one hand, treatment group experienced decrease 0.041, sig .438 after a half semester which is not significant and 0.083, sig .028 in another half which is significant. After one semester, it makes up 0.125 altogether. On the other hand, control group, the decrease is 0.387, sig .000 after the first half of the semester and 0.599, sig .000 after another half or 0.986, sig .000 in one semester. This wide gap might have resulted in the TP in treatment group and the absence of TP in control group.

Table 6
Pairwise comparisons for interest measure

Treatment						
(I) factor1	(J) factor1	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b] Lower Bound	Upper Bound
1	2	.041	.052	.438	-.067	.149
	3	.125*	.051	.025	.017	.232
Control						
1	2	.387*	.040	.000	.303	.470
	3	.986*	.071	.000	.839	1.133

*. The mean difference is significant at the .05 level.

Caring

Finally, the last MUSIC motivation subscale, Caring, experienced the highest decrease in both treatment and control groups compared to the other four subscales. As identified in table 7, treatment group dropped 0.390, sig .000 after one semester, 0.201, sig .003 in the first half and 0.190, sig .000 in the second half of the semester. At the same time, control group declined 1.493, sig .000 after one semester, 0.850, sig .000 and 0.643, sig .000 after the first and second half of the semester respectively. This statistic indicates that the decrease in both groups was significant (sig < .05). This statistic also shows that the gap between treatment and control groups is wide, even the widest compared to the other four subscales. This finding implicates the use of TP might have minimized the drop.

Table 7
Pairwise comparisons for caring measure

Treatment						
(I) factor1	(J) factor1	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b] Lower Bound	Upper Bound
1	2	.041	.052	.438	-.067	.149
	3	.125*	.051	.025	.017	.232
Control						
1	2	.387*	.040	.000	.303	.470
	3	.986*	.071	.000	.839	1.133

*. The mean difference is significant at the .05 level.

As it can be identified from the visualizations above, all subscales of motivation experienced decrease both in treatment and control groups with various degrees, but there was a wide gap in the decrease of all subscales between the two—treatment group was low but control group was high. Interestingly, the smallest and biggest drop in both groups ensued to the same subscales--the lowest drop was usefulness, and the biggest was caring. The decrease was 0.090 and 0.218 for treatment and control groups respectively in one semester. Even though they were statistically significant, the drop was actually light, especially for control group. The biggest drop happened to caring subscale. Treatment group dropped 0.390 but control group dropped 1.493; or the gap between the two groups was 1.103. The findings indicate that quantitatively, regardless the application of TP, motivation would decrease in the long run, however the decrease of motivation with TP was very low, meanwhile it was high without. In other words, TP has a significant effect in sustaining motivation in a long-term online gamified EFL listening course. Table 8 below shows that mean square between groups was 14.445 bigger than within group .235 indicates that the decrease of the two groups was significantly different at F-value 61.500 and sig .000<.05. This also implicates that the effect of TP was significant in minimizing the drop of students' motivation. The finding is consistent with (Hanus and Fox, 2015b) that students' intrinsic motivation decreases overtime in online gamified class. It is also in line with (Mahmud et al., 2020a).

Table 8
Mean differences between and within groups

One-way ANOVA

Score

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	14.455	1	14.455	61.500	.000
Within Groups	147.609	628	.235		
Total	162.065	629			

Assignments and Discussion Forum

The other two indicators of the increase or decrease of motivation can be identified through the length of time needed to submit weekly assignments and responsiveness toward and quality of discussion forum. The two indicators show a slight difference from the result of statistic of MUSIC motivation questionnaire above. Firstly, as seen in figure 3, the box plot shows the time needed to finish and submit to SPOT. It shows that the participants in treatment group needed much less time to submit their assignments than those in control group. It took 1 to 2 days to finish and submit their assignment in treatment group, meanwhile, in control group, it needed 3 to 5 days. Secondly, with regard to discussion forum, the difference is identified in treatment group which experienced slight increase in students' motivation. This can be seen in figure 9, treatment line increases slightly over time during that semester. This evidence is different from the finding resulting from statistical measurement of MUSIC motivation questionnaire. However, the trend in control group is similar to that of from questionnaire which decreased over time during the semester, even though the decrease was slightly lower in discussion forum.

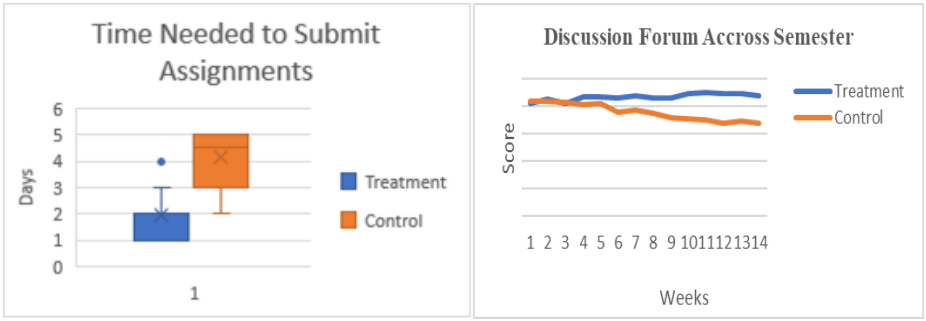

Figure 3
Effect of TP on assignment and discussion forum

The finding in the changes of motivation state over time during the semester indicates that it happened probably because of the effect of TP particularly with respect to active facilitation and direction from the instructor in treatment group. Students' active participation could be maintained over time, from the beginning to the end of the semester. Their frequency and quality of contribution even slightly increased by the end of the semester. On the other hand, participations in control group decreased over time. Initially, it was slightly higher than treatment group, but declined consistently until the end of the semester. At the end of the semester, the gap was quite wide. Sustained participation in treatment group could have been the result of instructor's active facilitation and direction. Feedback, elicitation, challenges, and thought-provoking questions in discussion forum might have motivated the participants to search for information to provide evidence to back up or justify their views. The absence of facilitation and direction might have resulted in less motivation for participants in control group. They might have got bored with weekly assignments and discussion forum without recognition and feedback from the instructor.

Qualitative Data

The deductive thematic analysis applied to the interview transcripts elicited students' perception of a long-term online gamified EFL listening course was evident in the data. The analysis was themed as "driving factors" to keep them motivated or demotivated during the course and perceptions of the application of TP in a long-term online gamified class. The themes were viewed as important to comprehend of all participants in treatment and control groups as to why their motivation increased or decreased over time.

Listening is an essential language skill that learning it is imperative as part of journey in language learning, so with or without gamification they will have to expose themselves to listening in the target language. However, they like to listen what they are interested in like music and sport and lifestyle. The weekly assignments were not interesting as they were repetitive and too easy for many students, however the topics of the assignments were in accordance with the lesson objectives in the course outline. Furthermore, the instructor feedback, facilitation, and direction what vocabulary,

expressions, and grammar concepts for further learning from websites are helpful to strengthen their listening skills and somehow what motivated them to keep learning. With respect to the discussion forum, they liked the topic as they realize they were prospective English teachers. They appreciated the active involvement, facilitation and direction of the instructor (in treatment group) that without which the students in control group got bored and, in the long run, less motivated. In treatment group, Instructors' involvement, facilitation, direction, and feedback in discussion forum were perceived as the most important and useful to keep them active in the forum and driven them to learn more before making contribution. This finding is in line with the study by Malpartida (2021, p. 155) that students perceived positively lecturer's facilitation, in the form of direction and feedback.

The gamification was perceived not that interesting as there are many online games they preferred to play and they are more and more interesting from time to time as technology for the games keep progressing, however, challenges in gamified class were good for them, it was better than they experienced in previous listening course which was not gamified. However, in the long run, the students in control group admitted they got bored and less motivated. Without feedback and guidance, they felt like they were "disoriented". On the other hand, in treatment group, the interviewees admitted that they wanted to get acknowledged and get good marks. For some students, they were motivated to earn badges and trophies, and they were proud when they were announced as the badge or trophy awardees. However, for some others they felt demotivated as they knew it was hard to earn those things. They thought that just a few of the students could get badges or trophies due to their best ideas in discussion forum or the best score in gamified quizzes. Most interviewees mentioned that leader board was the most discouraging element followed by badges. These findings correspond to Toda et. al (2018) and Kamunya et. al (2021) and that game design may lead to a negative impact and leaderboards are strongly associated to many negative effects especially performance loss. Figure 4 visualize embedded announcement on the SPOT about the top five highest performing students.

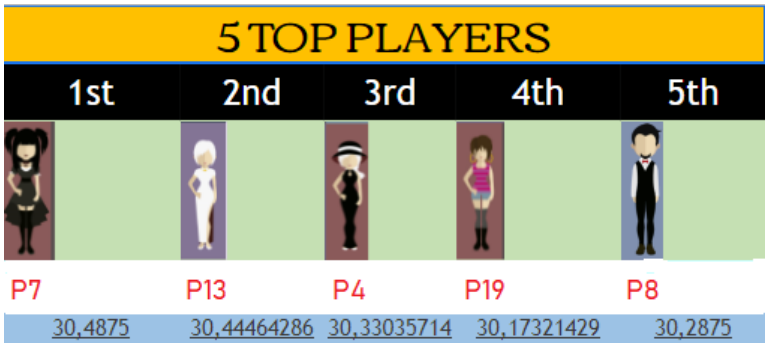

Figure 4
Gamification element—leader board

Regarding extra points given for their active participation during synchronous Zoom meeting or discussion forum, the participants' in treatment group admitted to be the factor that nurtured their participation and contribution. They thought that everyone in the class could earn extra points as they were active during Zoom sessions or in discussion forum. Additionally, they perceived punctuality of submitting assignment or appearance in Zoom meeting as, again, they viewed that everyone could get the extra points. However, they admitted that learned a lot and motivated particularly due to the feedback, facilitation, and direction from the instructor.

The qualitative findings indicate that gamification has the potential to cause different and conflicting effects (Kwon & Özpolat, 2021). As mentioned above, game elements are motivating fort some students but discouraging for the other. The acknowledgments to students' achievements like badges and trophies awarded to "the best" or "the highest" do not provide equal opportunities for all students since only the "strongest" have big chance to gain the award. However, the class activities that offers equal opportunities to get badges or extra points like being on timers in Zoom synchronous session, submitting assignments on time five or 10 times in a row, or frequency of contribution in discussion forum are motivating for all. As a matter of fact, all students are motivated by facilitation and direction from instructors. Instructors' active involvement in students' discussion are also motivating and engaging for students. Therefore, it is actually TP that is imperatively needed to build engagement and improve motivation.

The confirmation of negative sides of gamification in this research should be taken as a beneficial guidance for teachers that there are certain circumstances to be taken into account before employing gamification. Long-term gamification has to be integrated with TP to sustain students motivation and improve performance (Hanus and Fox, 2015b), otherwise, it produce unintended consequences (Kwon and Özpolat, 2021). Certain games elements like leaderboard or ranking system should be avoided for its demotivating impacts (Toda et. al., 2018; Kamunya et. al., 2021). Reward systems of ability-based competitions are disadvantageous to some students with introversion (Xiao, 2022), but time-based are acceptable to all. In other words, types of activities used in have to be fitted personality, attitude and age (Elsa et.al., 2021). Last but not least, teachers should also accommodate students' learning styles (Al Mulhim, 2021)

To summarize, the research has some implications to take into account when implementing long-term online gamified courses particularly EFL listening. First, gamification without integration with TP would not be effective in either improving students' performance or motivation (Hanus and Fox, 2015b). In a long-term online gamification, students' intrinsic declines over time (Mahmud et al. 2020b). Second, some students, especially those high achievers, are enthusiastic with gamification, but some others are the other way around (demotivated). Besides, gamification effect is distinct due to different personalities (Smiderle et al., 2020). Thus, an instructor should be aware of game design and the condition when certain aspects or elements of gamification should be avoided. Some students are OK with leader board and badges but some others are negatively affected (Toda et. at., 2018). Third, gamification cannot

be viewed as instant "therapy" to lowly motivated and engaged students since it calls for thoughtfully design long before its application, or it will be just a game without educational purpose (Ruizalba et. al., 2016). Gamification should be integrated with TP for optimal result of distance learning. Naas, a trainer said:

CONCLUSION

Teaching presence was able to enhance students' performance in a long-term gamified EFL listening course. Statistical analysis revealed that there were significant differences of the mean score of pre-tests from post-test in the class implementing TP. Improvement of listening achievement was evident at significance .042 < .05. On the other hand, control group had a significance .369 which is higher than .05 that means there is no significant differences between mean of pre-test and post-test. The application of TP with respect to providing facilitation and direction may have maintained students' motivation that led to the improvement of achievement, conversely, the absence of TP may have weakened the students' motivation resulting in stagnant achievement at the end of the semester.

The application of TP was unable to maintain students' motivation in a long-term gamified EFL listening course; both with or without TP experienced the decrease in all subscales of MUSIC motivation in one semester. However, the use of TP was able to minimize the decrease, on the contrary, the absence of TP worsened it. The decrease in treatment group ranged from 0.09-0.39, and control group 0.218 to 1.493, thus treatment group suffered a slight decrease but the control experienced severe decrease. Additionally, with regard to assignment and discussion forum, the application of TP had sustained students' motivation over time.

Thematic analysis pointed to the importance of applying TP in a long-term gamified EFL listening class? The participants' level of motivation was nurtured as a result of instructor's facilitation, direction, and feedback in the assignment and discussion. The provision of badges or trophies resulted in 'mixed' motivation, some participants were motivated but few of them were demotivated. The implication is that the instructor should be thoughtful in this case particularly to low achievers. However, extra points that made it possible or 'affordable' for all participants to earn like the punctuality of submission of assignments or appearance in Zoom meeting and frequency of contribution in discussion forum were perceived positively. Learning from the adverse effects of gamification, it isn't necessarily meant to be used for every lesson. Teacher has a discretion to determine the suitable method to incorporate gaming into the classroom. Gamification isn't a method for all, but rather just one more tool to access in your collection of resources for the virtual classroom.

The study recommends similar research to be carried out to the other three language skills (speaking, reading, and writing to figure out if the effects of TP in a long-term gamified virtual class in those respective skills. The finding also calls for further study on subscales MUSIC motivation, particularly Caring, as it experienced the most severe decrease. The recommendations are also aimed at edu-game developers to develop

games that are effective, engaging, and fun for EFL learning not ones that make students just love the games.

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