




## Exploring online writing collaboration through Herzberg's two factor theory: A case study




 Nursyuhada Zakaria<sup>1</sup>

 Nursuhaila Ibrahim<sup>2+</sup>

 Noor Hanim Rahmat<sup>3</sup>

 Maisarah Noorezam<sup>4</sup>

 Nadzrah Sa'adan<sup>5</sup>

<sup>1,2,3,4,5</sup> Akademi Pengajian Bahasa, Universiti Teknologi MARA, Carwangan Johor, Kampus Pasir Gudang, Malaysia.

<sup>1</sup>Email: [syuhadazakaria@uitm.edu.my](mailto:syuhadazakaria@uitm.edu.my)

<sup>2</sup>Email: [nursu957@uitm.edu.my](mailto:nursu957@uitm.edu.my)

<sup>3</sup>Email: [noorh763@uitm.edu.my](mailto:noorh763@uitm.edu.my)

<sup>4</sup>Email: [maisa691@uitm.edu.my](mailto:maisa691@uitm.edu.my)

<sup>5</sup>Email: [nadzr210@uitm.edu.my](mailto:nadzr210@uitm.edu.my)



(+ Corresponding author)

### ABSTRACT

#### Article History

Received: 16 February 2023

Revised: 6 April 2023

Accepted: 28 April 2023

Published: 17 May 2023

#### Keywords

Collaborative writing

Demotivators

Information technology

Learning writing

Motivators

Online writing.

Writing undoubtedly can be a complex and daunting process. When learners write collaboratively, they get to share ideas and knowledge that can ease the task. The present study intends to explore the perceptions of online collaborative writing and factors that can motivate or demotivate learners to write collaboratively. Thirty undergraduate students participated in this study and responded to a questionnaire which consists of 37 items after completing a collaborative writing task online for 14 weeks. Overall, the respondents had a positive perception towards online collaborative writing and this motivated them to complete the work. Poor internet connection, time management and lack of concentration were the challenges faced which hindered their progress in online collaborative task. The findings of the study yield interesting insights and implications on the teaching and learning of collaborative writing, especially in online settings.

**Contribution/ Originality:** This paper reports on the online writing collaboration to provide further insight into the internal and external factors that influence learners to write collaboratively. The paper's primary contribution is finding that learners perceived online collaborative writing positively as it is beneficial to them as well as facilitating educators in teaching and learning.

## 1. INTRODUCTION

### 1.1. Background of Study

Collaborative writing is one type of writing task which is carried out with a peer/s to produce a written product. This peer collaboration has become a common pedagogical practice employed in L2 classrooms. Collaborative writing enhances students' writing fluency skills (Pham, 2021) and significantly improves students' writing performance (Li & Mak, 2022). With these countless benefits it offers and rapid changes in the teaching and learning process, students can now write collaboratively through various mediums such as in-person collaboration and online collaborative tools using blogs, padlet, wiki, Google Docs, Microsoft OneNote etc.

Writing in an online environment may be helpful and challenging at the same time for English Second Language (ESL) learners. The challenges may stem from the activity of writing itself as Brown (2000) believes that writing involves a lot of thinking process. The process includes brainstorming ideas, drafting, pre-writing, revising and editing. In collaborative writing, the process of writing can be shared and discussed as both partners are responsible for the final written product produced. To ensure the collaborative work in an online setting is a success, there are many determinants that encourage learners in completing the written work. One key factor for this is students' motivation in writing. This aspect can be driven by various external and internal factors which influence students' quality of work and their collaborative experience as well.

### *1.2. Statement of Problem*

Ideally, collaborative writing benefits writers in achieving better content as they interact, share and negotiate ideas during all stages of writing. This is proven in a study by Nassaji and Tian (2010) where they found that the final written product of collaborative writing is grammatically accurate. Dobao (2012) later agreed that this collaboration had a positive impact on the linguistic accuracy of the texts produced. In addition, there is a substantial improvement in organization, content and vocabulary (Shehadeh, 2011) as the writers have a meaningful recursive process when writing.

However, the mentioned strengths of writing together become less interesting in online context. Though it is still possible to conduct this collaborative writing online, learners have different levels of motivation that could affect their level of participation (Chen, 2021). Therefore, this study is conducted to explore (a) motivators and (b) demotivators that influence online collaborative writing. Intrinsic and extrinsic motivation, concentration, interaction, time management and technical problems are among the factors discussed in the process of writing, especially in an online environment. Thus, this study intends to investigate how these factors play parts in writing collaboratively online.

### *1.3. Objective of the Study and Research Questions*

Generally, this study explores learning writing online. This online learning is then focused on collaborative writing activities. Specifically, this study is done to look at learners' perception on online collaborative writing. This study then answers the following research questions;

- How do motivators influence online writing collaboration?
- How do demotivators influence online writing collaboration?

## **2. LITERATURE REVIEW**

### *2.1. Online Writing Collaboration*

#### *2.1.1. Benefits of Online Writing Collaboration*

Online environments offer many benefits for collaborative writing. A study done by Andrew (2019) found that the participants noted benefits of working together on Google apps, including their simplicity of use, the ability to work remotely, and the ability to provide feedback online.

The flexibility of writing anywhere and anytime has also received favourable feedback from respondents when it comes to online writing collaboration (Moonma, 2021). Additionally, using online tools, like Google Docs, have improved students' learning experiences and aided the process of learning through the teacher's written corrective feedback in order to comprehend the writing work (Nasri, Habali, & Adam, 2022).

#### *2.1.2. Drawbacks of Online Writing Collaboration*

Some studies have reported some problems in online writing collaboration. Yarrow and Topping (2001) stated that students' behavior in terms of interactions were not satisfied. This happened because they did not socialise

adequately with their teammates. Additionally, the online learning experience was found to be complex and unpredictable (Godwin-Jones, 2018). According to Chen and Yu (2019) a negative attitude from peers is one of the reasons students are not motivated to participate in online collaborative writing tasks.

Villarreal and Gil-Sarratea (2020) revealed that there are some teachers that may act too passively when faced with collaborative group management. Regarding this drawback, lecturers should motivate students and inspire them to write online collaboratively.

## 2.2. Past Studies

### 2.2.1. Past Studies on Motivating Factors for Online Writing

Motivation is regarded as one of the most important factors for writing collaboratively online. In a study conducted by Ashwak (2016) 32 female students in Grade 12 were interviewed and they also completed a questionnaire about the main factors that motivate or demotivate them in collaborating in their class wiki. They found that extrinsic motivators, such as marks and praises, were deemed pertinent for these students. The study also revealed that the majority of the respondents were willing to work collaboratively if the work was divided equally among them. This shows that equality is essential in collaborative writing.

Another study conducted by Dobao and Blum (2013) explored the effectiveness of collaborative writing in pairs and small groups in the setting of foreign language learning. A total of 55 respondents answered a questionnaire after completing the writing task, pretest and posttest activities. The findings revealed that the perception of the respondents towards collaborative writing was very positive due to their positive experiences dealt by the respondents during the collaborative work. Collaborative tasks enabled them to brainstorm ideas, thus contributing to a more creative and accurate work produced, especially in grammar and vocabularies used.

### 2.2.2. Past Studies on Demotivating Factors for Online Writing

In their qualitative case study, Esra and Sevilen (2021) investigated how students' view of online instruction affect their motivation to study. The data was collected from 12 students by semi-structured interviews and samples of their creative writing. They discovered that a lack of social interaction, dissimilarities between expectations and content, and organisational structure issues, negatively impact student motivation in online education.

A study by Zaitun, Hadi, and Harjudanti (2021) was done to investigate the impact of online learning on student learning motivation. The study's extensive literature review revealed that the demotivating factors in the online setting include the unvarying method and lack of focus and feedback from the teacher. Students also felt pressured to study from home especially when teachers lacked an innovative mindset.

Next, Sinha and Bagarukayo (2019) did a comparative analysis of 252 respondents from two countries; India and Uganda, on demotivating factors of online education. The findings resulted in two main demotivating factors which are 'lack of awareness' and 'lack of personal attention'. They concluded that learners were familiar with the traditional way of learning and that lack of interaction with peers and instructors in an online setting seems to be an issue. The learning process was found to be difficult for learners without social interaction.

## 2.3. Conceptual Framework of the Study

Figure 1 presents the conceptual framework of the study. This study explores how online collaboration relates to Herzberg's Two Factor theory. Herzberg, Mausner, and Snyderman (1959) introduced the two-factor theory that explains the factors that affect an individual's satisfaction and motivation level. These factors are (a) job satisfaction (affective/hygiene) and also job satisfaction (motivational). However, in the context of this study, Herzberg's theory is used to explain the behaviour of online learners. In the context of writing collaboration, to complete the writing task in a group, the team has to face both (a) Motivators and (b) Demotivators. The motivation to complete the online task can refer to the members' perception of how the task can be a success. It can

also include the members' willingness to work as a team. Demotivators can be seen as either (i) external or (ii) internal. External factors include technical problems, while internal problems can refer to aspects like lack of concentration, lack of interaction, time management, and even lack of motivation to work as a team.

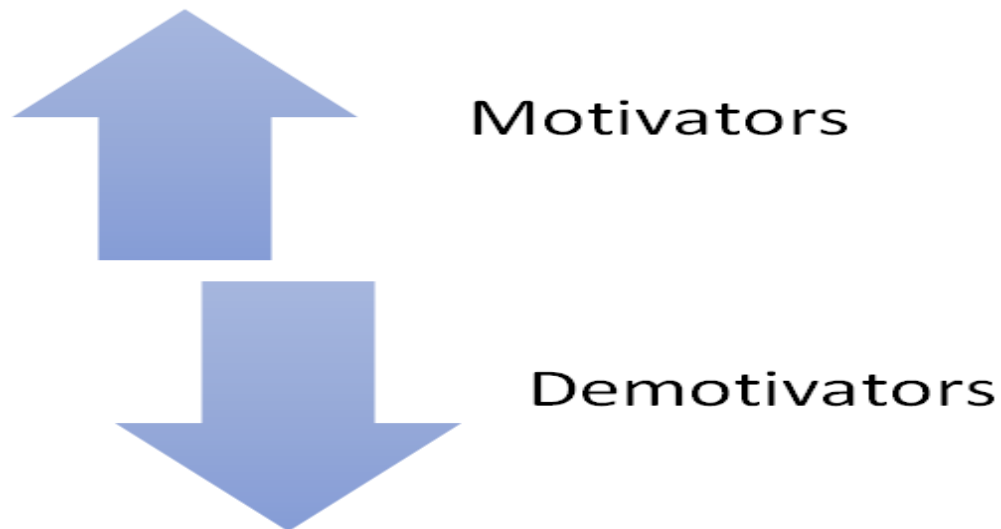


Figure 1. Conceptual framework of the study: Motivators and demotivators for online writing collaboration.

### 3. METHODOLOGY

This pilot study employs the quantitative method. It is done to explore learners' perception about writing via online collaboration. The participants were purposively chosen. They underwent a semester of learning academic writing using online platform. The students completed their tasks collaboratively. The distribution of items in the instrument (survey) is shown in Table 1. The 5 Likert-scale survey is adapted from several studies. The Likert scales used were 1 for strongly disagree, 2 for disagree, 3 for neutral, 4 for agree and 5 for strongly agree. The survey has 4 sections in which section A has three items on demographic profile. With reference to Table 1, section B has 12 items on 'Motivation to Write Online'. The items were adapted from Dobao (2012) and Ashwak (2016). Section C has 10 items on 'Demotivating Factors- External'. The items were adapted from Loan (2021); Chu, Capio, van Aalst, and Cheng (2017); Nguyen and Nguyen (2021); Nugraha and Listyani (2021); Yee and Yunus (2021) and also Irshad (2022). Section D has 15 items on 'Demotivating Factors-Internal'. This section is further subdivided into 3 items on 'Lack of Concentration' in which the items were adapted from Loan (2021) and Tran (2021). The next sub-category is 'Lack of Interaction', which has 2 items adapted from Loan (2021). Next, 'Time Management' has 6 items adapted from Loan (2021) and Alyami, Abdulwahed, Azhar, Binsaddik, and Bafaraj (2021). Finally, 'Lack of Motivation' has 4 items adapted from Loan (2021) and also Nugraha and Listyani (2021).

Table 1. Distribution of items in survey.

Section	Heading	Subheading	No. of subitems	Total
B	Motivation to write online (MWO)	-	-	12
C	Demotivating factors when learning to write online (External) DWO-EX	Technical problems	-	10
D	Demotivating factors when learning to write online (Internal) DWO-IN	Lack of concentration	3	15
		Lack of interaction	2	
		Time management	6	
		Lack of motivation	4	
Total number of items				37

Prior to the data collection, ethics approval was obtained. Table 2 shows the reliability statistics for the survey. SPSS analysis shows a Cronbach alpha of 0.918; thus, revealing a high reliability for the survey.

Table 2. Reliability statistics for survey.

Reliability statistics	
Cronbach's alpha	N of items
0.918	37

Q1. Gender

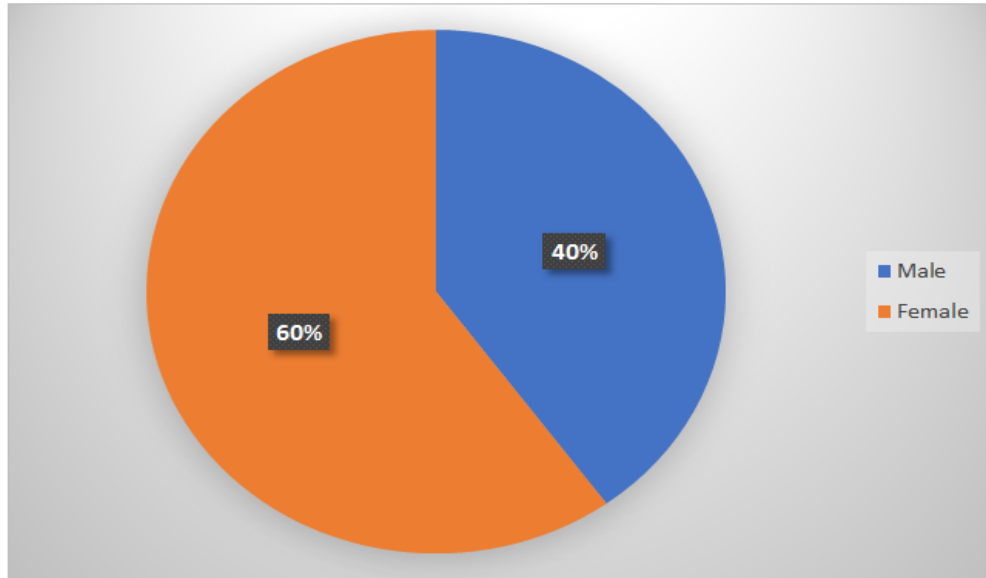


Figure 2. Percentage for Gender.

## 4. FINDINGS

### 4.1. Findings for Demographic Profile

Figure 2 shows the percentage for gender. 40% of the respondents are male while 60% are female.

Q2. Discipline/Course

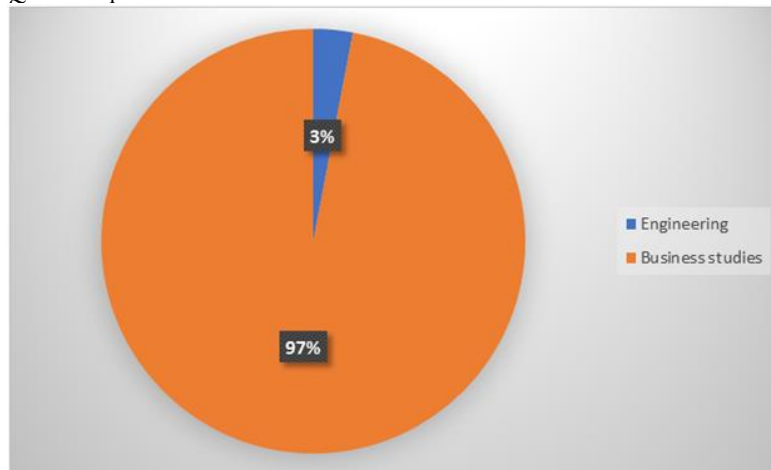


Figure 3. Percentage for discipline.

Figure 3 shows the percentage for discipline. 3% of the respondents are from engineering and 97% are from business studies.

Figure 4 shows the percentage for Information Technology (IT) skills. 97% claimed they have moderate skills and 3% claimed they have low skills. Meanwhile, no respondents claimed that they are very proficient in IT.

Q3: How would you describe your IT skills

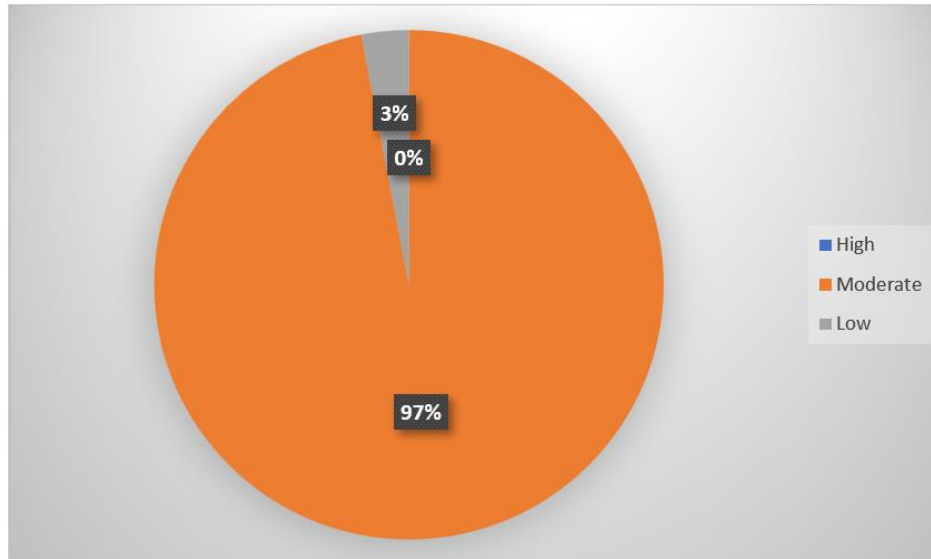


Figure 4. Percentage for IT skills.

Table 3. Mean for motivators.

Section D – Motivation to write online collaboratively online		
No	Statement	Mean
1	If I had written the text individually instead of in a group or a pair, I think its content would have been worse.	3.2
2	If I had written the text individually instead of in a group or a pair, I think its vocabulary would have been worse.	3.4
3	If I had written the text individually instead of in a group or a pair, I think its grammar would have been worse.	3.3
4	I think this collaborative writing task was helpful to improve my vocabulary knowledge.	3.8
5	I think this collaborative writing task was helpful to improve my grammar knowledge.	3.9
6	I feel that collaboration is interesting if we select our team members.	3.9
7	I am willing to participate in online discussion if the topic is interesting.	3.8
8	I am willing to collaborate online if the teacher rewards me.	3.5
9	I am willing to collaborate online when the task is divided equally and each of us does her part.	4
10	I feel happy if my classmates help me in my project.	4.1
11	I feel happy if I help my friends.	4.1
12	I feel that it is very beneficial for all of us to help each other at work.	4.3

#### 4.2. Findings for Motivators

Table 3 shows the mean for motivators in writing collaboratively online. The highest mean recorded is on item 12 (M=4.3) where the respondents feel that it is very beneficial for them to work together. The second highest mean score is shared by items 10 and 11 (M=4.1) showing that the respondents feel happy if they are able to help and being helped by their friends in completing their project. Meanwhile, the lowest mean goes to the first item (M=3.2) indicating that the students think that the quality of their work is worse if it is being done individually instead of in a group or in a pair.

#### 4.3. Findings for Demotivators

Table 4 shows the external demotivator factors among students. The external factor is mainly focusing on technical problems when students learn to write online collaboratively. The highest mean score at 3.3 for ‘I have a slow/unstable internet connection’. The second highest mean shared by 3 items and they are, ‘I have inadequate/insufficient digital devices or equipment to learn writing online’, ‘I have limited ICT knowledge/skills’,

and 'I encounter problems/errors related to the online platform used'. Next, the lowest mean at 2.3 are for item 8, 'the explanation given by my lecturer is unclear' and item 9, 'My lecturer has limited knowledge/literacy in ICT'.

**Table 4.** Mean for demotivators-external.

<b>Section E – Demotivation factors when learning to write online collaboratively (External) (DWOEX)</b>		
<b>Technical problems</b>		
<b>No</b>	<b>Statement</b>	<b>Mean</b>
1	I have a slow/unstable internet connection.	3.3
2	I have inadequate/insufficient digital devices or equipment to learn writing online.	2.8
3	I have limited ICT knowledge/skills.	2.8
4	The online writing platform is difficult to use.	2.7
5	I encounter problems/errors related to the online platform used.	2.8
6	I do not understand the nature of the assignment/task that I have to do.	2.5
7	The course materials provided are unsuitable/difficult for me.	2.4
8	The explanation given by my lecturer is unclear.	2.3
9	My lecturer has limited knowledge/literacy in ICT.	2.3
10	My partner/groupmate has limited ICT skills to use the online platform.	2.5

**Note:** ICT refers to information and communication strategies.

**Table 5.** Mean for demotivators -internal.

<b>Section F – Demotivation factors when learning to write online collaboratively (Internal)-DWOIN</b>		
<b>No</b>	<b>Statement</b>	<b>Mean</b>
<b>(i) Lack of concentration</b>		
1	I am easily distracted with other things (e.g. phone, house chores etc.).	3.7
2	I do not have a proper learning environment to study.	3
3	I tend to lose concentration gradually in a long-lasting teaching session.	3.1
<b>(ii) Lack of interaction</b>		
4	It is difficult for me to understand what I learn due to less interaction with the teacher and classmates.	3
5	I feel that online writing class is less fun without direct interaction with the teacher and classmates.	3
<b>(iii) Time management</b>		
6	I am not good at managing time when I take a writing course online.	2.8
7	I find it difficult to do online tasks as it requires more time than on-campus classes.	2.8
8	I often tend to delay my task.	2.9
9	I feel that my time management skill needs more improvement.	3.7
10	I find out that online learning is challenging and it has affected my time.	3.1
11	My performance in online learning is degraded due to mis-planning.	3.2
<b>(iv) Lack of motivation</b>		
12	I am not motivated when I take a writing course online.	2.6
13	I find it difficult to be motivated to study as much as I do at school.	2.9
14	I am not excited and could not focus during the online course.	2.6
15	I am less creative in writing because I am tired of writing course online.	2.6

Table 5 depicts the mean for internal demotivators among students. There are four main categories in this section; lack of concentration, lack of interaction, time management and lack of motivation. The highest mean at 3.7 is shared by item 1, "I am easily distracted with other things (e.g. phone, house chores etc.)" and item 9, "I feel that my time management skill needs more improvement". These two items are from lack of concentration and time management factors, respectively. Next, item 2, "I do not have a proper learning environment to study." Item 4, "It is difficult for me to understand what I learn due to less interaction with the teacher and classmates." and item 5, "I feel that online writing class is less fun without direct interaction with the teacher and classmates.", show the same average mean score of 3. The lowest mean score at 2.6 comes from lack of motivation category, with three out of four items selected. There are item 12, "I am not motivated when I take a writing course online", item 14, "I am not excited and could not focus during the online course", and item 15, "I am less creative in writing because I am tired of writing course online".

## 5. CONCLUSION

### 5.1. Summary of Findings and Discussion

In the present study, students' perceptions towards learning writing online were examined. Specifically, it explores the factors that influence their perceptions of online collaborative writing. Generally, the finding suggests that students perceive collaborative writing tasks positively as they feel collaborative writing benefits them in many ways. A similar finding was reported by Zhai (2021) in his study in the context of Chinese as a foreign language. Even though the motivation fluctuated, the students were aware of the importance of collaborative writing once they felt a sense of accomplishment. The current study shows that when learners possess a positive attitude towards collaborative writing task, it will indirectly influence their perceptions too. The positive attitude and perception towards the collaborative task drive learners to cooperate and contribute to the task. It is also important to note that the demotivating factors revealed in this study have also been reported in other studies on collaborative work. For instance, the challenge of having technical problems was also reported by Nykopp, Marttunen, and Erkens (2019) and Liu, Liu, and Liu (2018) in their studies. In addition, time management was also reported as one of the biggest challenges in collaborative writing. This is consistent with the study carried out by Al-Rawahi and Al-Mekhlafi (2015) in which the respondents expressed their concerns about time constraints. However, for the current study, this challenge may be attributed to lack of concentration in completing the writing task. Some respondents reported that they tend to get easily distracted with other things, which then leads to procrastination.

### 5.2. Pedagogical Implications and Suggestions for Future Research

The findings obtained from this study have several implications on the teaching and learning writing in ESL classrooms. As presented in the findings of the study, learners may be motivated by different types of motivations to learn writing. Therefore, educators should be able to provide support and assistance where necessary while teaching as well as facilitating online writing in ESL classrooms. With the right support and exposure from the educator and environment, it is hoped that learners will be more aware of the aspects that would be helpful for them in writing collaboratively. In addition, when they are aware of the factors that can help them in writing, they will be able to avoid distractions that hinder their writing performance.

In the process of planning and conducting this research, there were some limitations that occurred. Therefore, these limitations should be addressed and taken into account for future studies. The first limitation is in terms of the sample size of the participants. Since this study is a pilot study, only a small sample was chosen to be the participants of the study. Hence, the findings cannot be generalized to the whole population of ESL learners. Future research should therefore be carried out using a larger sample size to gain in-depth information about the learners' motivation in writing. Secondly, it is also suggested that future research could conduct semi-structured interviews with the participants to triangulate the data from the survey. Thus, a thorough analysis can be done to gain further insights about factors that motivate or demotivate learners in writing collaboratively.

**Funding:** This research is supported by Universiti Teknologi MARA, Johor Branch; and Research Management Centre, Universiti Teknologi MARA, for providing and managing the funds from the Geran Penyelidikan Bestari Fasa 1/2022 Universiti Teknologi MARA Johor (Grant number: REC/07/2022 (PG/MR/140)).

**Competing Interests:** The authors declare that they have no competing interests.

**Authors' Contributions:** All authors contributed equally to the conception and design of the study.

## REFERENCES

- Al-Rawahi, L. S., & Al-Mekhlafi, A. M. (2015). The effect of online collaborative project-based learning on English as a foreign language learners' language performance and attitudes. *Learning and Teaching in Higher Education: Gulf Perspectives*, 12(2), 74-91. <https://doi.org/10.18538/lthe.v12.n2.186>



- Alyami, A., Abdulwahed, A., Azhar, A., Binsaddik, A., & Bafaraj, S. M. (2021). Impact of time-management on the student's academic performance: A cross-sectional study. *Creative Education*, 12(3), 471-485. <https://doi.org/10.4236/ce.2021.123033>
- Andrew, M. (2019). Collaborating online with four different google apps: Benefits to learning and usefulness for future work. *Journal of Asia TEFL*, 16(4), 1268-1288. <https://doi.org/10.18823/asiatefl.2019.16.4.13.1268>
- Ashwak, A. Y. (2016). The role of motivation in online collaboration from an active learning perspective. *Information Management and Business Review*, 8(2), 26-35. <http://dx.doi.org/10.22610/imbr.v8i2.1270>
- Brown, H. D. (2000). *Teaching by principles-an interactive approach to language pedagogy* (2nd ed.). New York: Addison Wesley Longman, Inc.
- Chen, W. (2021). Understanding students' motivation in L2 collaborative writing. *ELT Journal*, 75(4), 442-450. <https://doi.org/10.1093/elt/ccab027>
- Chen, W., & Yu, S. (2019). A longitudinal case study of changes in students' attitudes, participation, and learning in collaborative writing. *System*, 82, 83-96. <https://doi.org/10.1016/j.system.2019.03.005>
- Chu, S. K., Capio, C. M., van Aalst, J. C., & Cheng, E. W. (2017). Evaluating the use of a social media tool for collaborative group writing of secondary school students in Hong Kong. *Computers & Education*, 110, 170-180. <https://doi.org/10.1016/j.compedu.2017.03.006>
- Dobao, A. F. (2012). Collaborative writing tasks in the L2 classroom: Comparing group, pair, and individual work. *Journal of Second Language Writing*, 21(1), 40-58. <https://doi.org/10.1016/j.jslw.2011.12.002>
- Dobao, A. F., & Blum, A. (2013). Collaborative writing in pairs and small groups: Learners' attitudes and perceptions. *System*, 41(2), 365-378. <https://doi.org/10.1016/j.system.2013.02.002>
- Esra, M., & Sevilen, C. (2021). Factors influencing EFL students' motivation in online learning: A qualitative case study. *Journal of Educational Technology and Online Learning*, 4(1), 11-22. <https://dergipark.org.tr/en/pub/jetol/issue/60134/817680>
- Godwin-Jones, R. (2018). Chasing the butterfly effect: Informal language learning online as a complex system. *Language Learning & Technology*, 22(2), 8-27. <https://doi.org/10.125/44643>
- Herzberg, F. I., Mausner, B., & Snyderman, B. (1959). *The motivation to work* (2nd ed.). New York: John Wiley.
- Irshad, M. (2022). Challenges encountered during synchronous online collaborative writing via google docs. *International Journal of Web-Based Learning and Teaching Technologies*, 17(6), 1-14. <http://doi.org/10.4018/IJWLTT.287554>
- Li, J., & Mak, L. (2022). The effects of using an online collaboration tool on college students' learning of academic writing skills. *System*, 105, 102712. <https://doi.org/10.1016/j.system.2021.102712>
- Liu, M., Liu, L., & Liu, L. (2018). Group awareness increases student engagement in online collaborative writing. *The Internet and Higher Education*, 38, 1-8. <https://doi.org/10.1016/j.iheduc.2018.04.001>
- Loan, B. T. K. (2021). The challenges of online writing learning via microsoft teams. *AsiaCALL Online Journal*, 13(1), 132-149. <http://eoi.citefactor.org/10.11251/acoj.13.01.008>
- Moonma, J. (2021). Comparing collaborative writing activity in EFL classroom: Face-to-face collaborative writing versus online collaborative writing using google docs. *Asian Journal of Education and Training*, 7(4), 204-215. <https://doi.org/10.20448/journal.522.2021.74.204.215>
- Nasri, N. F., Habali, A. H. M., & Adam, M. H. M. (2022). Google docs: Students' perceptions as online collaborative tool in learning writing skills. *International Journal of Academic Research in Progressive Education and Development*, 11(3), 690-705. <http://dx.doi.org/10.6007/IJARPED/v11-i3/14611>
- Nassaji, H., & Tian, J. (2010). Collaborative and individual output tasks and their effects on learning English phrasal verbs. *Language Teaching Research*, 14(4), 397-419. <http://dx.doi.org/10.1177/1362168810375364>
- Nguyen, T. N. M., & Nguyen, P. H. (2021). Difficulties and some suggested solutions in studying online of the students in Van Lang University during the Covid-19 pandemic. *AsiaCALL Online Journal*, 12(4), 9-17. <https://asiacall.info/acoj/index.php/journal/article/view/58>

- Nugraha, D. S. A., & Listyani, L. U. (2021). Problems encountered by students in online creative writing class and the solutions. *Edulingua: Journal of Applied Linguistics and English Education*, 8(2), 33-44. <https://doi.org/10.34001/edulingua.v8i2.2435>
- Nykopp, M., Marttunen, M., & Erkens, G. (2019). Coordinating collaborative writing in an online environment. *Journal of Computing in Higher Education*, 31, 536-556. <https://doi.org/10.1007/s12528-018-9203-3>
- Pham, V. P. H. (2021). The effects of collaborative writing on students' writing fluency: An efficient framework for collaborative writing. *Sage Open*, 11(1), 1-11. <https://doi.org/10.1177/2158244021998363>
- Shehadeh, A. (2011). Effects and student perceptions of collaborative writing in L2. *Journal of Second Language Writing*, 20(4), 286-305. <https://doi.org/10.1016/j.jslw.2011.05.010>
- Sinha, E., & Bagarukayo, K. (2019). Online Education in Emerging Knowledge Economies: Exploring factors of motivation, demotivation and potential facilitators; and studying the effects of demographic variables. *International Journal of Education and Development using Information and Communication Technology*, 15(2), 5-30. <https://files.eric.ed.gov/fulltext/EJ1220780.pdf>
- Tran, M. T. T. (2021). Microsoft teams in the context of freshmen ELF learning. *AsiaCALL Online Journal*, 12(2), 12-23. <https://asiacall.info/acoj/index.php/journal/article/view/92>
- Villarreal, I., & Gil-Sarratea, N. (2020). The effect of collaborative writing in an EFL secondary setting. *Language Teaching Research*, 24(6), 874-897. <https://doi.org/10.1177/1362168819829017>
- Yarrow, F., & Topping, K. J. (2001). Collaborative writing: The effects of metacognitive prompting and structured peer interaction. *British Journal of Educational Psychology*, 71(2), 261-282. <https://doi.org/10.1348/000709901158514>
- Yee, L. Y., & Yunus, M. M. (2021). *Collaborative tools in enhancing ESL writing during covid 19: A systematic review*. Paper presented at the International Conference on Business Studies and Education (ICBE). <https://www.icbe.my/wp-content/uploads/2021/07/Lo-Yuok-Yee.pdf>
- Zaitun, Z., Hadi, M. S., & Harjudanti, P. (2021). The impact of online learning on the learning motivation of junior high school students. *Bisma The Journal of Counseling*, 5(1), 56-63. <https://doi.org/10.23887/bisma.v5i1>
- Zhai, M. (2021). Collaborative writing in a Chinese as a foreign language classroom: Learners' perceptions and motivations. *Journal of Second Language Writing*, 53, 100836. <https://doi.org/10.1016/j.jslw.2021.100836>

*Views and opinions expressed in this article are the views and opinions of the author(s), International Journal of Asian Social Science shall not be responsible or answerable for any loss, damage or liability etc. caused in relation to/arising out of the use of the content.*