Are Two Heads Better than One? Comparing Engagement between Pairs and Individuals in an L2 Writing Task

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Abstract

This study examined the performance of university foreign language learners on a writing task by comparing paired work (*n* = 50) against individual work (*n* = 50). Data were collected based on three aspects of learners' task engagement: behavioural (time spent working on the task, number of words written), linguistic (English writing scores), and affective (attitudes toward the task). The results showed that (1) all participants worked on the task for the same amount of time and produced a similar number of words, (2) texts written by pairs were similar to and as accurate/fluent as those written individually, and (3) learners who worked in pairs evaluated the task more positively than did those who worked individually. A more detailed examination using cluster analysis revealed that while there was generally a positive relationship between each aspect of task engagement, a trade-off might occur depending on the situation, and one aspect might mediate the effect of others. In addition, by examining the differences between a successful and a less successful pair, this study provides pedagogical implications in relation to the use of pair work activities in the language classroom.

Keywords: *Pair Work, Collaborative Writing, Picture Description Task, Attitudes Toward the Task*

Introduction

Pair work has received much attention in second/foreign language (L2) education and second language acquisition (SLA) research (e.g., García Mayo, 2021; Philp, Adams, &

Iwashita, 2014; Sato & Ballinger, 2016). Because a major goal of language education is to develop communicative abilities, it is natural to emphasize pair and group interactions. Through pair work, learners have more opportunities to use the language within the classroom and collaborate with their peers. Previous SLA research has also shown that compared to teacher-student interactions and individual learning, peer interactions between students not only promote social interactions between them but also lead to higher learning outcomes (e.g., Fernández Dobao, 2012, 2014; Kim, 2008; McDonough, 2004; Nassaji & Tian, 2010; Sato & Ballinger, 2016; Storch, 2002, 2007; Suzuki & Storch, 2020; Wigglesworth & Storch, 2009). However, does simply pairing students up lead to effective pair work? What is the difference between pairs that work and pairs that do not? What problems do the latter face? By examining these issues from a holistic and integrated perspective, this study aims to offer pedagogical implications concerning pair work in the language classroom.

Pair Work and Collaborative Writing

Pair work is frequently used as a form of instruction in language classes as it increases opportunities for learners to use the target language in the classroom. Most foreign language learners do not have adequate opportunities to do so outside of the classroom, especially if English is not used routinely, as is the case in Japan—the target context of this study. In such a case, pair work may have a desirable impact on their language development. Not surprisingly, research on pair and group work in SLA has focused on investigating specific linguistic features arising from their interactions (e.g., the number of words produced, the number of turns exchanged, language-related episodes).

In this study, we examine collaborative writing in pair work. Relatively little time has been devoted to writing instruction in English classes. Indeed, the lack of experience in writing English has been repeatedly highlighted in studies on junior and senior high schools in Japan (Kimura, Kimura, & Shiki, 2010). The results of a survey of English teachers from approximately 200 Japanese universities (Takada, 2004) also revealed that, among the four skills (i.e., listening, speaking, reading, and writing), writing was covered in only about 5% of classroom instruction. Furthermore, compared to the other three skills, the use of collaborative activities in writing is still limited (Storch, 2013). Therefore, a more in-depth exploration of the possibilities of collaborative writing should be of great significance, both theoretically and practically.

Collaborative writing is generally defined as an activity in which two or more learners work together to interact with one text (Storch, 2005). Mutual engagement among learners, shared decision-making, and joint responsibility for the final product is critical to the success of this process. Extant research has suggested that collaborative writing benefits language learning in many ways (e.g., McDonough, Crawford, &

Vleeschauwer, 2016; Storch & Aldosari, 2012; Villarreal & Gil-Sarratea, 2020; Watanabe & Swain, 2007; for a recent review, see Zhang & Plonsky, 2020). For example, writing activities with two or more learners produce interactions that have more variety and are of greater quality and quantity, increase the use of the target language, and ensure greater grammatical accuracy in writing. Compared to individual writing activities where students have to rely solely on their knowledge of a language, working in pairs or groups allows them to share their knowledge and, consequently, deal with more cognitively demanding learning tasks (Scott & de la Fuente, 2008; Teng, 2021). Studies have also shown that learners tend to solve more vocabulary-related problems through collaborative writing (Kim, 2008; Sato & Angulo, 2020), which is believed to facilitate vocabulary acquisition. In a nutshell, collaborative writing is a potent means to provide abundant language learning opportunities and, importantly, the achievement of higher-order learning outcomes in the classroom.

However, there have been notable inconsistencies in results regarding learners' perceptions of collaborative writing. While many studies have examined different learners' perceptions of collaborative writing and found that students tend to have positive attitudes toward the activity (e.g., Fernández Dobao & Blum, 2013; Qiu & Lee, 2020; Shehadeh, 2011), a significant number of other studies have reported that learners did not necessarily perceive it favourably and even expressed scepticism toward it. For example, McDonough (2004) conducted a collaborative writing activity comprising pair and group work among 16 English as a Foreign Language (EFL) university learners to investigate their perceptions of such activities. The results revealed that although the learners engaged in activities with each other and had several opportunities to learn, they felt that these activities were not conducive to language learning. Although the learners gave each other grammatically correct feedback, they were concerned that they would pick up the wrong grammar from their partners. Elola and Oskoz (2010) reported a case study of eight learners of advanced Spanish at an American university. Although learners were generally positive about the paired writing activity, they had different reasons for preferring individual writing (e.g., differences in learning styles, avoiding conflicts or disagreements, ease of scheduling). Similar findings were reported by Storch (2005), who noted that learners believed that pair work was more suitable for activities such as speaking while writing was essentially an individual activity. Some of the learners were unsure of their language skills and, therefore, hesitant to criticize others.

Research Intent and Research Questions
Although collaborative writing appears to be effective in promoting linguistic development, not all learners necessarily positively perceive these activities. This suggests that at present, there is a gap between theory (research) and practice. If we can

identify what type of learner(s) regard collaborative writing positively, then we can implement more effective pair work in the classroom. Unfortunately, previous research approaches tended to isolate individual factors for examination, limiting their ability to provide an accurate and holistic picture of their influence. For example, it is still unclear whether learners' satisfaction is higher if their linguistic performance is higher or whether their satisfaction may be higher (or lower) even if their performance is lower (or higher).

To address these issues, this study takes a broader view of learners' approaches to collaborative writing in terms of behavioural (time spent working on the task and number of words written in English), linguistic (English writing scores), and affective (learners' attitudes toward the task) aspects of learner task engagement, and comprehensively examines the practice of pair work. To further clarify task engagement characteristics among pairs, we compare their efforts with individual students working independently. The research question is

RQ: What types of relationships and interactions exist among three aspects of task engagement (i.e., behavioural/linguistic/affective), and how do these relationships and interactions differ between pairs and individuals?

Method

Participants

A total of 100 first-year EFL students (42 female, 58 male) from a private university in Japan participated in this study. All students were Japanese, aged between 18 and 20, and had studied English for at least six years at school as a compulsory subject before entering university. Students had been divided into beginner, elementary-intermediate, and intermediate levels based on the university placement test. Of these three levels, we had selected four elementary-intermediate classes to participate in the study and randomly divided them into two groups: a collaborative group ($n = 50$, 2 classes) and an individual group ($n = 50$, 2 classes). The collaborative group worked on the task described below in pairs, while the individual group worked on the same task individually.

Task

A picture description task consisting of a four-frame cartoon (cited from Heaton, 1975) was used. Participants were instructed to interpret the cartoon's plot and describe its content in English. Handouts were prepared with the cartoon positioned at the top of an A4-sized sheet of paper and space left blank below for participants to write down their descriptions. The cartoon can be briefly described here as follows: (1) A family is eating at a restaurant when a fly enters through the window; (2) The son stands, rolling up a

newspaper to try and hit the fly; (3) He aims at the fly and strikes at it, although he also seems to have hit something else. The family applauds and rejoices at his successful manoeuvre; (4) A gentleman pops up behind the window, glaring at the blushing son. The son had not hit the fly but had hit his bald head.

Procedure

The participants were provided instructions for the task in advance (e.g., do not use dictionaries and reference materials; collaborative groups to work in pairs), and the actual activity time was set at 20 minutes. Participants were also instructed to record the time spent working on the task. The teacher walked around the classroom during the activity to check whether participants were following the instructions but did not provide any linguistic support. The task itself was conducted as part of the regular lesson. In the week following the activity, model answers and feedback on common mistakes were returned to participants.

Data Collection

Data were collected based on behavioural, linguistic, and affective aspects of learners' task engagement. For the behavioural aspect, the time spent on the task (i.e., behavioural engagement; Philp & Duchesne, 2016) by each pair or individual was recorded at the bottom of the handout. The total number of words written in English was also counted. For the linguistic aspect, English descriptions of the cartoon were scored on a 10-point scale using four perspectives (Jacobs et al., 1981; Shehadeh, 2011): (1) Content (0–3 points, whether the content of the illustration is adequately mentioned); (2) Organization (0–3 points, whether the structure and development of the illustration are clearly explained); (3) Vocabulary (0–2 points, whether the appropriate vocabulary is correctly used to explain the illustration); and (4) Grammar (0–2 points, whether elements such as grammar and punctuation are correctly used). Two researchers, each with more than ten years of experience teaching English at the university level, scored each piece of writing separately; the average score between the two was then considered the English writing score for each pair or individual (the inter-rater reliability of writing score by the two raters was .76). A questionnaire—with five multiple-choice and three open-ended questions—was administered after the task was completed for the affective aspect. Multiple choice questions assessed participants' attitudes toward the task (i.e., emotional engagement; Philp & Duchesne, 2016). Sample questions included "I found the task interesting" and "I was able to work on it enthusiastically," and were rated using a five-point Likert scale ranging from 1 (not at all) to 5 (very well). Cronbach's alpha was .85, confirming internal consistency.

Open-ended questions asked participants to describe what they felt, noticed, and remembered about their completed task.

Data Analysis

Descriptive statistics and correlation coefficients were first calculated for each of the three aspects—behavioural, linguistic, and affective. We then used an independent *t*-test to examine whether there was a difference between pairs and individuals in the mean of each aspect. Next, participants (pairs and individuals, respectively) were classified into groups with similar characteristics according to the differences in the means of each indicator (i.e., time spent working on the task, number of words written in English, English writing scores, and attitudes toward the task), and each group was examined in detail. Cluster analysis (Ward's method with squared Euclidean distance technique) was used for this grouping because of its usefulness in categorizing subjects based on several traits (Hair & Black, 2000). It was hypothesized that some pairs and individuals would have balanced high averages in all aspects (i.e., positive relationships and interactions); different patterns might also be observed in others (i.e., negative relationships and interactions). Finally, answers to the open-ended questions were coded and categorized. Here, one researcher performed the coding, and his research assistant reviewed the analyses. Additional discussions were held in case of disagreements until the researchers reached an agreement (e.g., some categories were grouped into sub-categories and placed in the newly created primary categories).

Results

Descriptive Statistics and Correlations

Table 1 summarizes the descriptive statistics and the results of the independent *t*-tests. There was no statistically significant difference between pairs and individuals concerning the behavioural and linguistic aspects (all *ps* > .05). As for the latter, when the mean scores of the two groups were compared for each of the four perspectives (i.e., Content, Organization, Vocabulary, Grammar), there was again no significant difference between the two groups (all *ps* > .05). These results suggest that, as far as this study is concerned, two heads are NOT necessarily better than one when it comes to writing picture descriptions in English. Conversely, for the affective aspect, a different trend was observed. Learners who worked in pairs had more favorable attitudes than did those who worked individually (*t* [73] = 3.98, *p* = .00, *d* = 0.98). As a whole, while there was no difference in the way participants tackled the task (behavioural), or in the outcome of the task (linguistic), satisfaction with the task (affective) was higher among those who worked in pairs.

Table 1

Descriptive statistics and t-test results for each indicator in pairs and individuals

Indicator in each aspect	Pairs (*n* = 50; 25 pairs)		Individuals (*n* = 50)		*t* (73)	*p*	Cohen's *d*
	M	*SD*	*M*	*SD*			
Behavioural aspect							
- Time spent working on the task	18.65	6.58	21.29	5.86	-1.76	.08	0.43
- Number of words written in English	61.16	21.53	67.58	28.73	-0.99	.33	0.24
Linguistic aspect							
- English writing scores	5.72	1.32	5.81	1.79	-0.22	.83	0.05
Affective aspect							
- Attitudes toward the task	4.40	0.52	3.74	0.74	3.98**	.00	0.98

** *p* < .01.

Table 2 summarizes the results of the analysis of correlation coefficients between each indicator. Some interesting results were observed: although the number of words written in English increased as the time spent working on the task increased (pairs: *r* = .60; individuals: *r* = .44), English writing scores (pairs: *r* = .16; individuals: *r* = .05) and attitudes toward the task (pairs: *r* = .25; individuals: *r* = .14) did not necessarily improve; this was the case for both pairs and individuals. This result indicates that the writing content and the level of satisfaction do not improve simply because time spent on the task increases. More notably, it was observed that among learners who worked individually, when the number of words written in English increased, so did their scores (*r* = .49); for learners who worked in pairs, such a trend was less apparent (*r* = .26). In other words, learners who worked alone—in silence, concentrating on their writing, and consequently increasing their word count—tended to score higher. In contrast, learners who worked in pairs may have sacrificed some points—as well as time, depending on how they interacted with each other—when they disagreed on content.

Table 2

Results of the correlation coefficients for each indicator in pairs and individuals

Indicator	1	2	3	4
1. Time spent working on the task	−			
2. Number of words written in English	.60**/ .44**	−		
3. English writing scores	.16 / .05	.26 / .49**	−	
4. Attitudes toward the task	.25 / .14	.33 / .30*	-.02 / .23	−

Note. Pairs / Individuals

* *p* < .05.;   ** *p* < .01.

Cluster Analysis

In order to examine the relationships and interactions between each aspect of learner engagement in more detail, a cluster analysis using four indicators (i.e., time spent

working on the task, number of words written in English, English writing scores, and attitudes toward the task) was performed, and each pair or individual with similar characteristics was profiled. Since each indicator had different units, standardized values were used. Based on the dendrograms obtained from the analysis (see Appendix), we decided that it was appropriate to classify them into three clusters, each of which can be seen in Figure 1 (pairs) and Figure 2 (individuals), respectively. To confirm the validity of the grouping, ANOVAs were conducted. Results indicated significant overall differences among the clusters (all $ps < .01$).
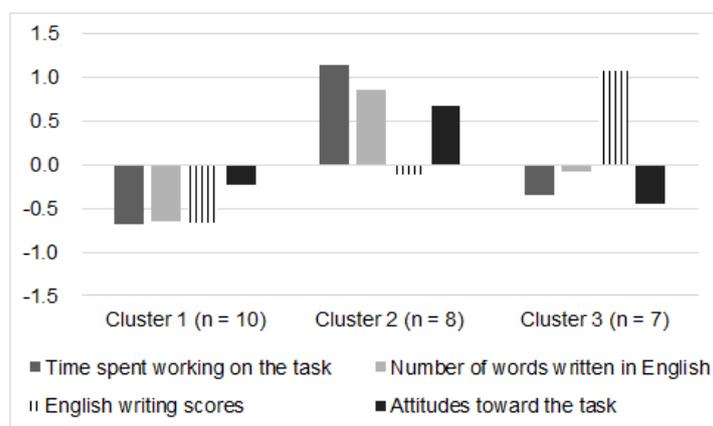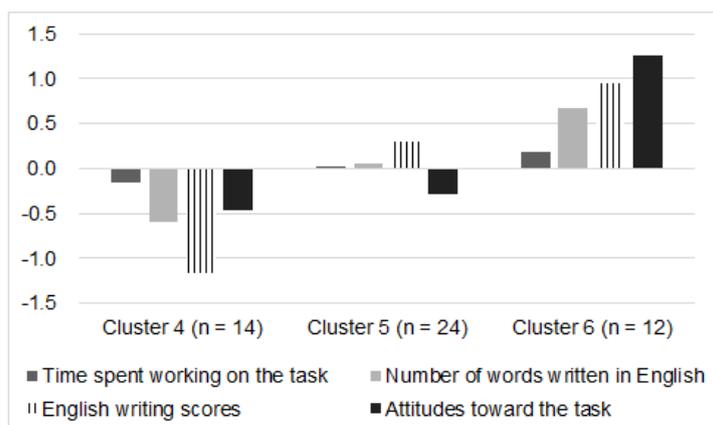

Figure 1. Results of cluster analysis of pairs.

Figure 2. Results of cluster analysis of individuals.

The scores of pairs in Cluster 1 were below the mean for all indicators. Time spent working on the task ($M = 14.19$, $SD = 3.83$), number of words written in English ($M = 47.40$, $SD = 13.10$), and English writing score ($M = 4.85$, $SD = 0.75$) all had the lowest means among the three groups. Conversely, Cluster 2 had the highest means of the three groups in terms of time spent working on the task ($M = 26.17$, $SD = 3.82$), number of words written in English ($M = 79.75$, $SD = 23.64$), and attitudes toward the task ($M = 4.75$, $SD = 0.36$), although its score in English writing did not differ from the overall

mean (Cluster 2: $M = 5.56$, $SD = 1.35$; Overall: $M = 5.72$, $SD = 1.32$). A major feature of Cluster 3 was its high score in English writing ($M = 7.14$, $SD = 1.35$). This result led us to expect that Cluster 3's participants would be the most satisfied with the task when their scores on attitudes toward the task were not as high as those of the others ($M = 4.16$, $SD = 0.54$). In other words, there seemed to be a "trade-off" relationship between English writing scores and attitudes toward the task. Cluster 3 pairs should have been the most satisfied, but this did not happen. Likewise, Cluster 2 pairs had the highest satisfaction scores, although their writing scores were almost average. These interactions between the various aspects of learners' task engagement will be discussed in more detail later.

Compared to the pairs, overall trends for individuals were easier to discern. Cluster 4's scores were below the mean for all indicators. In this sense, Cluster 4's individuals correspond to Cluster 1's pairs. In particular, Cluster 4's English writing scores ($M = 3.73$, $SD = 0.70$) were about two points lower than the overall average ($M = 5.81$, $SD = 1.79$). The scores of learners in Cluster 5 were close to the mean on all indicators. Considering that about half of the students (24 out of 50) made up this cluster, it was likely a result of the averaging out of all learners within one group. On the other hand, for Cluster 6, although the time spent working on the task did not differ much from the overall average (Cluster 6: $M = 22.33$, $SD = 6.69$; Overall: $M = 21.29$, $SD = 5.86$), they had the highest averages among the three groups in terms of number of words written in English ($M = 86.91$, $SD = 43.25$), English writing score ($M = 7.50$, $SD = 1.64$), and attitudes toward the task ($M = 4.67$, $SD = 0.39$). Overall, for individuals, there were generally positive relationships where each aspect was activating or strengthening another.

In summary, we can differentiate clear patterns among participants who had worked individually: a low average for all three behavioural, linguistic, and affective aspects (Cluster 4; see Figure 2); average scores in all aspects (Cluster 5), and an overall balanced high average (Cluster 6). Among participants who worked in pairs, one group had high levels of engagement (behavioural) and satisfaction (affective) with the task, even though the outcome of the task (linguistic) was average (Cluster 2; see Figure 1). Conversely, another group had particularly strong outcomes but low levels of engagement and satisfaction with the task (Cluster 3). In the following section, we further examine these results by analyzing the open-ended questions' comments.

Analysis of the Open-Ended Questions

Participants were asked to describe what they felt, noticed, and remembered about the task immediately after completing it. We categorized the answers obtained, which yielded six categories for pairs and four categories for individuals (for comparison

purposes, the results of individuals are treated in the same way as that for groups). Tables 3 and 4 show the classification results and their occurrence (in percentages) for pairs and individuals, respectively.

Table 3

Classification results for pairs: frequency of occurrence for different categories of comments

Cluster 1	Category	%
	1 Lack of English abilities	31.43
	2 Positive perceptions of the task	22.86
	3 Difficulty of the task	20.00
	4 Advantages of pair work	11.43
	5 Anxiety about the task engagement	8.57
	6 Self-efficacy	5.71
		100
Cluster 2	Category	%
	1 Advantages of pair work	32.26
	2 Lack of English abilities	25.81
	3 Positive perceptions of the task	19.35
	4 Difficulty of the task	16.13
	5 Anxiety about the task engagement	3.23
	5 Self-efficacy	3.23
		100
Cluster 3	Category	%
	1 Lack of English abilities	50.00
	2 Difficulty of the task	19.23
	3 Advantages of pair work	15.38
	4 Positive perceptions of the task	11.54
	5 Self-efficacy	3.85
		100

Table 4

Classification results for individuals: frequency of occurrence for different categories of comments

Cluster 4	Category	%
	1 Lack of English abilities	48.84
	2 Positive perceptions of the task	23.26
	3 Difficulty of the task	18.60
	4 Self-efficacy	9.30
		100
Cluster 5	Category	%
	1 Lack of English abilities	50.00
	2 Positive perceptions of the task	20.83
	3 Difficulty of the task	16.67
	4 Self-efficacy	12.50
		100
Cluster 6	Category	%
	1 Lack of English abilities	50.00
	2 Positive perceptions of the task	27.78
	3 Difficulty of the task	11.11
	4 Self-efficacy	11.11
		100

We highlighted three characteristics observed from the pairs' comments. First, in every cluster, approximately 25% to 50% of the comments described "lack of English abilities" (e.g., "I was very aware of my lack of English skills"; "I didn't understand the English word "*hage*" (bald). I again realized that my vocabulary was not good enough"). Many participants mentioned their difficulties with vocabulary and grammar (especially the use of tenses, articles, and prepositions). Second, although all clusters mentioned the "advantages of pair work," it was more prevalent in Cluster 2. Typical comments included: "At a quick glance, the content was meager, but through discussion with my partner, I was able to expand the content, and it became interesting"; "It was interesting because my friend's opinions and thoughts were different. In terms of content, we came up with a lot of ideas, so it was very detailed." In this way, the participants did not view differences of opinion with their partners as negative. Instead, such differences provided them with new perspectives and opportunities to exchange opinions. Third, every cluster had a large percentage of comments regarding the task itself, broadly divided into positive ("positive perceptions of the task") and negative ("difficulty of the task"). Positive comments included: "I enjoyed it because it was a four-frame cartoon. I felt like our imaginations improved because we were able to think about what it would look like"; "It was interesting to know that trying to translate difficult words can be challenging, but rephrasing them into simple words made it easier. I'd like to do this kind of activity

again." Negative comments included: "I found it difficult to explain the situation in the four-frame cartoon"; "There was a sudden appearance of an uncle, so I thought it was somewhat out of context." These reactions indicate that the characteristics of the task (e.g., topic, difficulty, and form of instruction) also affect participants' engagement, for better or worse.

The main characteristics of the comments from the individuals mirrored that of the pairs in the frequency of occurrence and order. Approximately half of the accounts in all the clusters mentioned the "lack of English abilities." The students commented, "I felt frustrated because I did not have enough vocabulary and also because I could not use a dictionary"; "There were words whose meaning I partially knew, but I was not sure what they really meant. I was painfully aware of my own inexperience in English." Individual participants' description of their "lack of English abilities" may be attributed to their inability to consult partners about words and grammar in lieu of dictionaries when they encountered problems. Thus, they had no choice but to remain vague or to give up. Among the participants in Cluster 6, many mentioned a lack of confidence in their English abilities even though they scored the highest in English writing. Additionally, only 10% of their comments addressed "self-efficacy" (e.g., "I was able to deal with most of the words I knew"; "It was a slightly easier task, and I was able to put the scene into sentences smoothly"). A relatively large proportion of individual participants mentioned the task itself; thus, the type of task chosen has important implications for individual efforts.

Discussion

This study compared pairs ($n = 50$; 25 pairs) and individual learners ($n = 50$) in their performance of the same writing task. Specifically, we focused on the relationships (or interactions) between behavioural (i.e., time spent working on the task and number of words written in English), linguistic (i.e., English writing scores), and affective (i.e., learners' attitudes toward the task) aspects of task engagement and how those relationships differed for pairs as compared to individuals. First, as for the unique effects of each aspect, the results demonstrated no noticeable difference between paired and individual efforts, except for positive attitudes toward the task. Thus, just working in pairs in a writing activity does not guarantee that participants will achieve higher results than they would individually. This result suggests that language teachers need to pay closer attention to the type and quality of the activity to see what is actually happening in the pair work. Second, regarding the combination effects, the results of both the cluster analysis and the open-ended questions revealed that pairs who worked on the task for a long time and had a high level of satisfaction reaped the benefits of pair work. In contrast, pairs who wrote well in English did not necessarily have a high level

of satisfaction with the task and tended to feel their lack of English ability and the task's difficulty more acutely. In general, learners who are good at English and/or highly motivated are more likely to be able to complete tasks without working as a pair. To enjoy the benefits of pair work, they would need to understand the purpose and significance of pair work.

The lowest English writing scores were found in Cluster 1 (M = 4.85) for pairs and Cluster 4 (M = 3.73) for individuals. Since the overall means of the two groups were not significantly different (5.72 for pairs and 5.81 for individuals), the difference between Cluster 1 and Cluster 4 can be attributed to the positive impact of cooperative efforts between the students in pairs. In comparison, the highest average scores were found in Cluster 3 (M = 7.14) for pairs and Cluster 6 (M = 7.50) for individuals, showing no significant difference between the two. This may be because pairs in Cluster 3 did not take full advantage of the benefits of pair work. Fernández Dobao (2012) noted that collaborative problem solving tends to occur when all members of a pair or group have a collaborative mindset, share ideas, and are actively involved in each other's contributions.

Similarly, Sato and Viveros (2016) examined the relationship between interactional moves and collaborative peer interaction patterns. They concluded that while proficiency does impact learners' interactional behaviours, a learner's psychological approach toward the partner and/or task (i.e., collaborative mindset) may be a stronger mediating factor for their task engagement, consequently, L2 development. However, as this study showed, such mindset and problem-solving behaviour do not occur spontaneously among students.

The process of collaborative writing requires students to share their opinions and give feedback to each other. Students often referred to their lack of English abilities and the task's difficulty in the post-task open-ended questions. This may have been an obstacle to expressing their opinions about their partner's ideas and writing in situations where they were not confident (Elola & Oskoz, 2010; Storch, 2005). In fact, among the participants in the present study, a few pairs were (too) passive in their approach to the task. For example, there was a threefold difference in the amount of speech during pair work between the pair with the least words (1382 words) and the most words (5775 words), and a 3.5-fold difference in the number of turns during pair work between the pair with the least (108 turns) and most turns (375 turns). Naturally, there were cases where the amount of speech was high, but the number of turns was low; in either case, the learners who played a leading role in the activity tended to have high amounts of speech and turns. In relation to this, Storch (2002, 2013) classified the patterns of interactions in pair work into four categories (i.e., Collaborative, Expert/Novice, Dominant/Dominant, and Dominant/Passive). Previous studies have repeatedly

highlighted that learners' interaction patterns fall into one of these four categories (e.g., Chen, 2018; Kim & McDonough, 2008; Watanabe & Swain, 2007). However, if learners are not confident in their English ability, as in the case of this study's participants, they may end up being passive (i.e., Passive/Passive). Therefore, for successful collaborative activities, it is necessary to create an atmosphere in which participants feel comfortable making mistakes; specifically, they need to feel comfortable making them in front of partners and appreciate their partner's opinions and feedback. If learners can accumulate such experiences in their daily classes, they will communicate more actively and confidently in pair and group activities.

As for the relationships between each aspect of task engagement, there were relatively simple positive relationships in the case of individuals, but negative relationships (i.e., trade-off) were also found in pairs. Namely, students might focus too much on one aspect (e.g., good relationships with the partner, good performance in English writing) and neglect others. Depending on the situation, each aspect of task engagement could deactivate or inhibit others. Learners' sufficient understanding of the benefits of pair work plays a particularly important role here. Although pairs in Cluster 2 were aware of the benefits of pair work and consequently had very positive attitudes toward the task, the "advantages of pair work" were mentioned by only 11.43% and 15.38% of the respondents in Clusters 1 and 3, respectively (Table 3). This highlights the importance of raising learners' awareness of the potential of collaborative learning in the classroom. Extant research has demonstrated that collaborative learning benefits language learning in many ways, but this is only possible when the learners understand its value (Fernández Dobao & Blum, 2013; McDonough, 2004). Therefore, teachers must explain the benefits of collaborative learning to their students explicitly. For example, teachers can exchange ideas with students about the advantages or disadvantages of pair work and have students experience actual pair work that incorporates the benefits. Pair work is often more active when one individual acts as the activity leader (Northouse, 2009). If pair work is to be conducted continuously in the classroom, it would be pertinent to have students alternating the role of leader while working on a task. Teachers can also show videos that display desired behaviours in collaboration and then prompt them to reflect on good or bad collaboration. When students buy into the potential of pair or group work, they will be more inclined to appreciate such learning benefits.

Conclusion

As with other studies, this study also has several limitations that could be addressed by future research. First, a limited number of participants engaged in performing a specific task, and caution should be exercised against overgeneralizing the results. Future

research should be conducted focusing on different task types and topics or to examine the impact of different partners. We could also implement collaborative writing regularly in the classroom to determine how learners' engagement and attitudes toward collaborative learning change over time. In addition, we could attempt to qualitatively analyze the kinds of interactions that take place between pairs.

This study analyzed students' approaches to pair work based on a combination of behavioural, linguistic, and affective aspects. Given that the process of language acquisition by individual students is already complex, it is not hard to imagine that language acquisition in pairs and groups is even more complicated. However, if the primary purpose of learning a language is to communicate with others, then it is only natural—if not of utmost importance—to pay attention to the study of communication in pairs and groups. In such studies, the researchers' cumulative, collaborative efforts can be premised on the principle that two heads are better than one.

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Appendix
Two dendrograms obtained through cluster analysis (Left: Pairs; Right: Individuals)
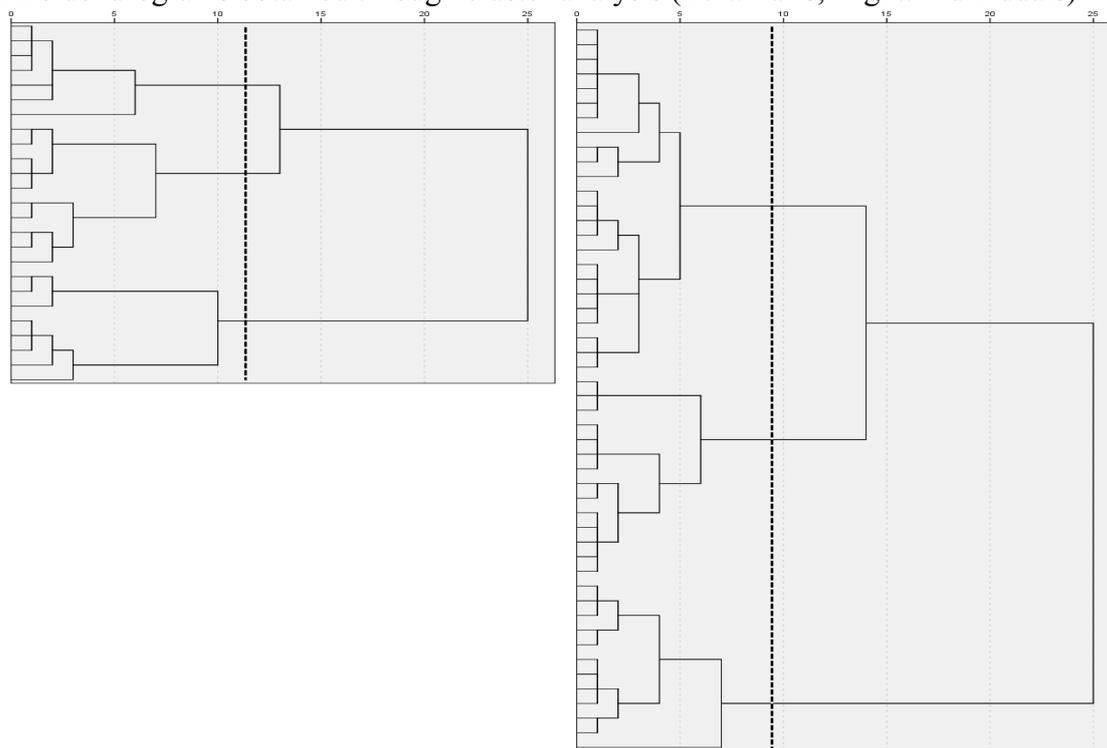
Ethics Declarations

Competing Interests
No, there are no conflicting interests.

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