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High-Performing and Low-Performing Iranian Learners' Attitude, Perception, and Motivation Toward Collaborative Writing



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ABSTRACT

This study, grounded in sociocultural theory, explores Iranian learners' attitudes, perceptions, and motivations toward collaborative writing. A mixed-methods approach was employed, involving a sample of 50 learners with different performance levels (high and low). Quantitative data were collected through three questionnaires focusing on attitude, perception, and motivation, complemented by qualitative data from reflective journals. The results of the attitude, perception, and motivation questionnaires indicated a generally positive outlook towards collaborative writing across both performance levels. Notably, high-performing learners scored significantly higher across all dimensions. Qualitative analysis confirmed these findings, revealing a positive attitude toward the educational value of collaborative writing. High-performing learners were more enthusiastic about collaborative writing than their low-performing peers. Thematic analysis of qualitative data identified seven key themes: peer collaboration, personal preferences and individual factors, impacts and outcomes, language development, efficiency, and enjoyment. Despite the overall consensus on the benefits of collaborative writing, challenges related to time management and individual differences were also noted. The findings provide valuable insights into the complex interplay between individual and group factors in collaborative writing, suggesting a possible link between learners' existing language proficiency and the benefits they derive from collaborative writing.

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1. Introduction

The field of English language teaching and learning has undergone a shift toward learner-centered approaches, emphasizing the benefits of collaboration in the language learning process. This focus originates from the transition from a linguistic approach to the communicative method, which was introduced in the 1970s (Littlewood, 2013). Collaborative writing, as a practical application of this approach, involves learners working in pairs or groups on writing tasks (Mohammad Hosseinpour et al., 2024).

Research indicates that learner interaction within a collaborative framework is crucial for developing language and communication skills (e.g., Ammar & Hassan, 2018; Bao, 2020; Sadiku, 2015). However, writing remains one of the most challenging skills for English as a Foreign Language (EFL) learners (Mohammad Hosseinpour et al., 2024). Collaborative writing offers a solution by allowing learners to exchange ideas and explore concepts, ultimately leading to improved writing quality (Storch, 2019). This aligns with Vygotsky's (1978) sociocultural theory, which asserts that learning is enhanced through joint exploration, discussion, and idea exchange (Dobao, 2012; Heidar, 2016).

Recent studies have documented the benefits of collaborative writing, including increased confidence, improved language skills, enhanced motivation, and better writing outcomes (e.g., Abahussain, 2020; Chen, 2021; Veramuthu & Shah, 2020). However, some research has highlighted potential challenges within collaborative writing contexts, such as difficulties in freely expressing ideas or managing group interactions (Tarmizi & Cheung, 2017; Winarti & Cahyono, 2020).

Several factors influence learners' experiences with collaborative writing, including their attitude, perception, and motivation. Existing research suggests that learners with a positive attitude have a better understanding of the benefits of collaborative writing and participate in this activity with higher motivation, ultimately leading to better writing outcomes (e.g., Anggraini et al., 2020; Chen & Yu, 2019; Pham, 2021; Jalili & Shahrokhi, 2017; Zhai, 2021). However, studies specifically examining these factors among learners with different proficiency levels are limited. Additionally, it remains unclear whether the findings of previous research can be generalized to Iranian EFL learners.

Therefore, this study adopts a mixed-methods approach to address the existing research gap and examine how the motivation, attitude, and perception of high- and low-performing Iranian learners are influenced by their experiences with collaborative writing.

2. Literature Review

2.1 Collaborative Writing

In second language (L2) writing instruction, various approaches are employed, each focusing on different aspects of the writing process. One such approach is the product-based method, which emphasizes the production of an accurate and well-structured final text. In this approach, learners develop their skills by using predefined templates and models, focusing on imitating language structures provided by the teacher.

In contrast, the process-based approach guides learners through different stages of text production, including planning, drafting, revising, and editing. This approach, which emphasizes gradual learning and the development of critical thinking, enhances

learners' cognitive and linguistic skills through continuous feedback.

Additionally, the genre-based approach holds a significant position in L2 writing instruction. This approach, which focuses on analyzing the structures and styles of various written texts, prepares learners for writing in real-world contexts and meeting social communication needs (Liu et al., 2024).

Each of these approaches contributes to the development of learners' linguistic and cognitive skills by focusing on different dimensions of writing. Among them, collaborative writing has emerged as a significant instructional approach in English as a Foreign Language (EFL) classrooms and aligns with the communicative language teaching approach (Bao, 2020).

Storch (2019) defines collaborative writing as an activity in which two or more writers work together to produce a single text. This method emphasizes interaction and cooperation, and research indicates that it can enhance the linguistic and communicative skills of EFL learners (Ammar & Hassan, 2018; Bao, 2020; Sadiku, 2015).

Vygotsky's sociocultural theory also emphasizes the importance of social interaction for cognitive development and supports collaborative writing (Burnazyan et al., 2024; Heidar, 2016; Mohammad Hosseinpour, 2015). Collaboration in writing allows learners to engage in providing feedback to each other, discussing, and exchanging ideas, which ultimately leads to a better understanding of the writing process and improved text quality (Storch, 2019).

One significant factor that plays a crucial role in improving text quality is task response. Learners who provide more accurate and better

task response typically demonstrate a greater ability to convey concepts and ideas clearly and coherently. Alongside task response, coherence and cohesion in writing are of special importance. Coherence refers to the logical connection between sentences within a paragraph, while cohesion pertains to the semantic and structural relationships between paragraphs. Both are key factors in producing high-quality writing. These characteristics ensure that the text is not only structurally strong but also maintains logical connections between its various sections.

Lexical diversity and correct use of grammatical structures significantly impact the quality of texts. The use of varied and precise vocabulary helps enhance clarity and accuracy in writing, making it more understandable for readers. Furthermore, the correct use of grammatical range, including the proper application of complex structures and references, improves the precision and logical structure of the text.

Recent research has shown that collaborative writing, as a group approach, leads to significant improvements in learners' task response, coherence and cohesion, lexical resources, and grammatical range in their writing. Collaboration and idea exchange in this process assist learners in enhancing their writing skills and producing more accurate and effective texts (Abahussain, 2020; Alkhalaf, 2020; Alawaji, 2020; Dobao & Blum, 2013; Winarti & Cahyono, 2020; Zulfikar & Aulia, 2020).

Previous studies have documented the positive outcomes associated with collaborative writing, including improvements in content, organization, vocabulary usage, accuracy, fluency, and the enhancement of critical thinking skills (Anggraini et al., 2020; Chen & Yu, 2019;

Dobao, 2012; Pham, 2021; Storch, 2019; Villarreal & Gil-Sarratea, 2019; Zhang, 2018).

However, recent studies have highlighted potential challenges in collaborative writing contexts, such as difficulties in freely expressing ideas or managing group dynamics (Tarmizi & Cheung, 2017; Winarti & Cahyono, 2020). These challenges emphasize the importance of effective strategies for implementing collaborative writing.

2.2 Vygotsky's Sociocultural Theory and Collaborative Writing

Vygotsky's (1978) sociocultural theory views learning as a social process that occurs through interpersonal interactions, facilitating cognitive development. One key component of this theory is the concept of the "Zone of Proximal Development" (ZPD), which suggests that learners can achieve higher levels of understanding and skill acquisition when interacting with more capable peers or instructors. Collaborative writing, as an interactive and socially driven activity, aligns with this theory. Through group interaction and scaffolded support, this approach provides a foundation for improving writing quality. Previous studies have confirmed that collaborative writing can enhance learners' linguistic and cognitive skills, contributing to their academic growth in educational settings (Anwar, 2021; Li, 2018; Pham & Nguyen, 2020; Pham et al., 2020; Zhang, 2018).

2.3 Individual Learner Differences

The success of collaborative writing can be influenced by individual learner differences, particularly in terms of attitude, perception, and motivation (Ellis, 2005). Individual differences refer to the unique characteristics and learning styles that each learner brings to the process of acquiring a target language. These distinct traits

vary from one learner to another and reflect their individuality in the language learning journey.

Attitude is defined as a complex construct encompassing an individual's affective, cognitive, and behavioral tendencies toward the target language and the learning process (Gardner, 1985). This multidimensional concept reflects learners' beliefs, emotions, and inclinations. Attitude in second language learning is not a fixed entity but rather a dynamic structure that can evolve over time. Various factors, such as prior language learning experiences, the perceived value of the target language, learning environments, teacher behavior, and cultural influences, can shape learners' attitudes (Dörnyei, 2005).

Motivation, derived from the Latin word *movere*, meaning "to move," plays a crucial role in language learning success and writing activities (Gass et al., 2020). It represents an internal drive that encourages learners to persist and exert effort in their language acquisition journey (Dörnyei, 2020). Highly motivated learners tend to engage in deeper learning, develop their language skills more rapidly, and pursue broader learning objectives. This intrinsic force not only fuels their efforts but also shapes their learning goals, whether for overall language proficiency or the enhancement of specific writing skills.

Perception, which refers to individuals' interpretation and understanding of the world around them, significantly influences learners' attitudes and approaches to language learning (Storch, 2013). Learners' perceptions of the value and effectiveness of specific learning methods, including collaborative writing, can impact their engagement and performance. For instance, if learners believe that the best language learning

occurs through interactive communication, they are more likely to actively participate in activities like collaborative writing, which promotes second language interaction. This highlights the importance of considering learners' perceptions when designing language learning activities and fostering positive attitudes toward specific instructional approaches.

2.4 Collaborative Writing in EFL Context

Previous research findings indicate that language learners who hold a positive attitude toward collaborative writing, have a strong understanding of its benefits, and possess high motivation tend to achieve better outcomes (e.g., Anggraini et al., 2020; Chen & Yu, 2019; Pham, 2021; Jalili & Shahrokhi, 2017; Zhai, 2021). These factors can influence the level of participation, willingness to engage in activities, and overall experience of learners in collaborative writing. Furthermore, these findings highlight the benefits of collaborative writing for fostering critical thinking, teamwork, and English language skills (Deveci, 2018; Winarti & Kahyono, 2020; Abahussain, 2020; Alkhalaf, 2020; Alawaji, 2020; Anggraini et al., 2020). Group collaboration enhances peer interaction, leading to improved idea generation, brainstorming, and text production (Winarti & Kahyono, 2020; Chen & Yu, 2019). Additionally, learners benefit from peer feedback, which helps strengthen grammar, vocabulary range, and overall writing accuracy (Zulfikar & Aulia, 2020; Abahussain, 2020).

However, research has also pointed to challenges associated with collaborative writing. Issues such as time management difficulties due to scheduling conflicts and uncooperative group members have been reported (Deveci, 2018; Chen & Yu, 2019; Zulfikar & Aulia, 2020).

Furthermore, managing disagreements, negative emotions, and unequal contributions within groups can be challenging (Chen & Yu, 2019; Alkhalaf, 2020). Motivation also plays a crucial role, as learners with similar proficiency levels may have varying degrees of motivation, which can impact their level of participation (Chen, 2021; Shahidan et al., 2022). Despite these challenges, recent studies suggest that teacher support and utilizing online collaboration tools such as Google Docs can enhance motivation and facilitate interaction (Zhai, 2021; Shahidan et al., 2022; Az Zahra & Febria, 2023).

Despite the increasing number of studies on collaborative writing and its impact on English learners, a significant research gap exists concerning Iranian language learners. Studies investigating Iranian learners' attitudes, perceptions, and motivations across different proficiency levels regarding collaborative writing remain scarce. Additionally, it is unclear whether findings from other countries can be directly applied to the English learning environment in Iran, considering cultural differences and the existing educational system.

This study aims to address this gap by adopting a mixed-methods approach to explore these factors in the Iranian EFL learning context. The findings will contribute to a deeper understanding of the impact of collaborative writing on Iranian learners and provide insights into improving instructional strategies to enhance its effectiveness for diverse learners. To achieve these objectives, the following research questions were formulated:

1. **Will Iranian EFL learners with high and low performance exhibit significant changes in their attitudes, perceptions, and**

motivation after completing collaborative writing activities?

2. What are the learners' perspectives on collaborative writing in high- and low-performing groups?

3. Methodology

3.1 Participants

This study was conducted with the participation of fifty Iranian male and female EFL learners enrolled in English for Academic Purposes (EAP) courses at a language institute. The participants were between 20 and 30 years old (mean~ 24 years) and came from diverse academic backgrounds. To classify participants into two performance levels, their writing scores from the IELTS test were used. The IELTS exam, widely recognized as a reliable assessment tool for language proficiency, served as the primary criterion for categorizing learners into two performance-based groups.

Based on their IELTS writing scores, the participants were divided into two groups. The high-performing group consisted of 26 participants (15 females and 11 males) who scored 5.5 or higher, whereas the low-performing group included 24 participants (14 females and 10 males) who scored below 5.5. This classification aimed to facilitate a precise comparison of attitudes, perceptions, and motivations between learners with different performance levels. Additionally, all participants had prior experience working on group assignments and projects related to their English courses, which helped familiarize them with collaborative tasks. These previous experiences enabled them to participate effectively in group settings and fulfill their roles in collaborative projects. It is also noteworthy that, despite their

diverse academic backgrounds, all participants were taught by the same instructor.

To ensure the accuracy and reliability of the grouping, all assessments were conducted based on official IELTS scoring criteria. The evaluations were carried out by two independent raters to enhance consistency and validity. This approach not only ensured the quality of the data but also aligned with established IELTS assessment standards that have been extensively utilized in previous research.

3.2 IELTS Writing Test

The IELTS writing test was used to ensure the homogeneity of participants and to categorize them into two performance groups (low and high). Writing samples, particularly essays from the second IELTS writing task, were assessed by two raters who were also the researchers of this study. The evaluation was based on four criteria: task response, coherence and cohesion, lexical resources, and grammatical range and accuracy. The inter-rater reliability coefficient was calculated at 0.71.

3.3 Questionnaires

In this study, three separate validated questionnaires were used to collect quantitative data on learners' motivation, attitudes, and perceptions toward collaborative writing. These instruments had been previously employed in various studies to assess similar variables. However, to ensure their validity and reliability within the specific context of the present study, they were re-evaluated. The results confirmed that all questionnaires were reliable and appropriately suited for measuring the target variables. Participants completed these questionnaires at the beginning and end of the course to assess changes in these factors throughout the collaborative writing project.

A validated questionnaire developed by Farrah (2011) was used to measure participants' attitudes toward collaborative writing. This instrument consisted of 32 items rated on a five-point Likert scale (ranging from "strongly agree" to "strongly disagree"). After re-evaluating this questionnaire in the present study, Cronbach's alpha was calculated at 0.96, indicating a very high internal consistency and reliability for this research.

Participants' perceptions of the process and outcomes of collaborative writing were assessed using a questionnaire designed by Mangelsdorf (1992). This instrument contained 22 items rated on a five-point Likert scale and was divided into four categories: self-contribution to teamwork, team collaboration, learning environment activeness, and communication and problem-solving skills improvement. After reassessment in this study, Cronbach's alpha for this questionnaire was found to be 0.95, demonstrating its suitability for the research.

A modified version of the questionnaire by Youyan Nie and Shun Lau (2010) was used to measure changes in learners' motivation. This instrument assessed motivation through a five-point Likert scale (1 = strongly disagree; 5 = strongly agree) and was divided into two sections: self-efficacy and the task value. After re-evaluating this questionnaire in the present study, Cronbach's alpha for the self-efficacy scale was calculated at 0.92, while the task value scale scored 0.89, confirming the high reliability of both measures.

3.4 Reflective Journals

Reflective journals, also known as learning diaries, are a well-established learning approach that supports the development of higher-order thinking skills (Cogni, 2019). These journals

serve as a means to facilitate self-reflection and introspection (Moon, 2006), encouraging students to examine their experiences and interactions over time (Thorpe, 2004).

In this study, reflective journals were used as a qualitative data collection tool. Throughout the collaborative writing project, participants recorded their ideas, personal thoughts, reflections, and experiences in two separate journal entries. These writings captured their learning progress, challenges and successes, and perspectives on collaboration with peers and feedback in the collaborative writing process.

4. Data Collection Method

This study employed a multi-stage approach to collect data on changes in participants' attitudes, perceptions, and motivation toward collaborative writing. Throughout this process, informed consent, anonymity, and ethical considerations regarding the participants were ensured.

Before the study commenced, participants' writing skills were assessed using a 250-word essay prompt, adapted from IELTS writing task 2. Two independent raters evaluated these essays using the IELTS Task 2 band descriptors. Based on the obtained scores, participants were categorized into high- and low-performing groups.

During the initial preparation stage, the instructor introduced the concept of collaborative writing, the roles of participants, and their interactions in dyadic groups to familiarize them with the process. Writing exercises, study objectives, and essay structures (introduction, body paragraphs, and conclusion) were explained. Participants were given two sessions to complete their essays, with the instructor available for assistance.

In the writing stage, argumentative essay topics were selected and adjusted according to the learners' proficiency levels. Participants collaboratively analyzed the topics, brainstormed ideas, and created essay outlines. During this process, they regularly worked together to assess and enhance the coherence and cohesion of their texts. Each learner was responsible for a specific section of the essay; however, to maintain overall structure and consistency, all group members continuously reviewed and revised the text together. For instance, one learner focused on writing the introduction and body paragraphs, while the other worked on the conclusion and counterarguments. This approach ensured equal participation and responsibility distribution while preventing a decline in text cohesion and coherence. Essays were jointly written, edited, reviewed, and proofread before submission.

After each essay was completed, participants individually wrote reflective journals to document their thoughts, emotions, and experiences regarding group dynamics and learning processes throughout the collaborative writing project.

Three questionnaires measured changes in motivation, attitudes, and perceptions toward collaborative writing. Participants completed these questionnaires at both the beginning and end of the course.

5. Data Analysis

The participants' writings were analyzed using valid band descriptors from IELTS writing task 2. Two independent raters assessed the writings to ensure scoring reliability and consistency. The inter-rater reliability coefficient was calculated at 0.71, indicating a good level of agreement. Based on their scores, learners were

categorized into high- and low-performing groups.

Quantitative data from the questionnaires were analyzed using the Statistical Package for the Social Sciences (SPSS) version 26. To assess within-group and between-group differences in attitudes, motivation, and perceptions among high- and low-performing groups, repeated measures ANOVA with simple effects analysis and Multivariate Analysis of Covariance (MANCOVA) was conducted.

Participants' reflections on the collaborative writing project were analyzed thematically using [Braun and Clarke's \(2006\)](#) framework. To ensure accuracy in coding, two coders thoroughly reviewed the reflections through multiple readings. This process facilitated a deeper understanding and the identification of potential themes. The coders began by generating initial codes, which involved labeling and categorizing relevant data segments using MAXQDA 2020 software. At this stage, different sections were marked with various colors to indicate categories relevant to the study's objectives.

Next, the coders identified patterns and connections among the initial codes. This phase involved organizing and grouping similar codes to form potential themes while paying attention to overlaps, similarities, and contrasts. The identified themes were then reviewed and refined to ensure coherence, distinctiveness, and accurate representation of content related to peer interaction and collaboration. Finally, for theme clarity, each theme was clearly defined and linked to participants' engagement and the collaborative writing process. This stage confirmed the validity of the themes identified in the learners' reflective journals. Both coders collaborated in the coding

process and achieved 93% inter-rater agreement in analyzing the reflections.

6. Results

To examine changes in participants' attitudes, perceptions, and motivation from the pre-test to

the post-test, a repeated measures ANOVA with simple effects analysis was conducted. Table 1 presents the descriptive statistics related to within-group differences.

Table 1
Descriptive Statistics for Pretests and Posttests of Attitude, Perception, and Motivation by Groups

Group	Time	APM	Mean	Std. Error	95% Confidence Interval	
					Lower Bound	Upper Bound
High	Pretest	Attitude	69.692	3.419	62.819	76.566
		Perception	42.885	2.505	37.848	47.921
		Motivation	19.385	1.248	16.875	21.895
	Posttest	Attitude	109.192	5.432	98.271	120.114
		Perception	75.731	3.711	68.268	83.193
		Motivation	33.115	1.725	29.647	36.584
Low	Pretest	Attitude	69.125	3.558	61.971	76.279
		Perception	44.667	2.607	39.425	49.909
		Motivation	18.875	1.299	16.263	21.487
	Posttest	Attitude	83.833	5.654	72.466	95.201
		Perception	60.458	3.863	52.691	68.225
		Motivation	20.917	1.796	17.306	24.527

The assumption of homogeneity of variances, which is important for the validity of the ANOVA test, was assessed using Levene's test. The results were satisfactory for pretest motivation, posttest attitude, and posttest motivation. However, violations were observed for pretest attitude, pretest perception, and posttest perception. To address these violations in the homogeneity of variances assumption, the results of the Repeated Measures ANOVA can be reported at the 0.01 level instead of 0.05 (Tabachnick & Fidell, 2019).

The between-subjects effects analysis, $F(1, 48) = 12.38, p < 0.05, \eta^2 = 0.205$, indicated a

significant difference (large effect size) between the high- and low-performing groups' overall means on the pretests and posttests for attitude, motivation, and perception. The within-subjects effects analysis did not directly address the research question concerning specific time-based changes. To delve deeper, a simple effects analysis was conducted (Field, 2018). This technique allows for a comparison of the means of the independent variables (attitude, perception, motivation) across different levels of another variable (pre-test vs. post-test in each performance group).

Table 2
Simple Effect Analysis

Group	APM	(I) Time	(J) Time	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval for Difference	
							Lower Bound	Upper Bound
High	Attitude	Post	Pre	39.500*	3.519	.000	32.425	46.575
	Perception	Post	Pre	32.846*	2.131	.000	28.562	37.131
	Motivation	Post	Pre	13.731*	.929	.000	11.864	15.598
Low	Attitude	Post	Pre	14.708*	3.663	.000	7.344	22.072

	Perception	Post	Pre	15.792*	2.218	.000	11.332	20.251
	Motivation	Post	Pre	2.042*	.966	.040	.098	3.985

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

Table 2 presents the results of the simple effects analysis, which have been interpreted as post-hoc comparisons. The low-performing group showed significant improvements in attitude from the pretest (M = 69.12) to the posttest (M = 83.83), (MD = 14.70, $p < 0.05$). Similar improvements were observed for perception (pretest: M = 44.66, posttest: M = 60.45, MD = 15.79, $p < 0.05$) and motivation (pretest: M = 18.87, posttest: M = 20.91, MD = 2.04, $p < 0.05$).

The high-performing group also demonstrated significant improvements across all three measures: attitude (pretest: M = 69.69, posttest: M = 109.19, MD = 39.50, $p < 0.05$), perception (pretest: M = 42.88, posttest: M = 75.73, MD = 32.84, $p < 0.05$), and motivation (pretest: M = 19.38, posttest: M = 33.11, MD = 13.73, $p < 0.05$). Overall, the results indicate that both groups experienced improvements in their

attitude, perception, and motivation following collaborative writing.

To examine between-group differences, Multivariate Analysis of Covariance (MANCOVA) was conducted. MANCOVA assumes the lack of univariate and multivariate outliers, normality, reliability, linearity between covariates (pretest) and posttest, homogeneity of regression slopes, homogeneity of group variances, and homogeneity of covariance matrices (Abu-Bader, 2021; Field, 2018; Pallant, 2016).

Table 3 presents the main results of the MANCOVA. The findings ($F(3,43) = 42.55$, $p < 0.01^1$, partial $\eta^2 = 0.748$, indicating a large effect size) suggest that after controlling for the effect of pretest, significant differences remained between the mean scores of the high- and low-performing groups on the posttests of attitude, perception, and motivation.

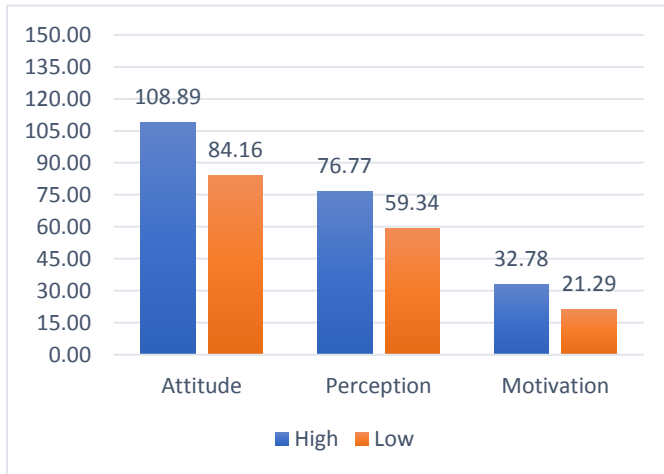
Table 3
Multivariate Analysis of Covariances

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Squared	Eta
Intercept	Pillai's Trace	.112	1.809	3	43	.160	.112	
	Wilks' Lambda	.888	1.809	3	43	.160	.112	
	Hotelling's Trace	.126	1.809	3	43	.160	.112	
	Roy's Largest Root	.126	1.809	3	43	.160	.112	
Pre-Attitude	Pillai's Trace	.609	22.301	3	43	.000	.609	
	Wilks' Lambda	.391	22.301	3	43	.000	.609	
	Hotelling's Trace	1.556	22.301	3	43	.000	.609	
	Roy's Largest Root	1.556	22.301	3	43	.000	.609	
Pre-Perception	Pillai's Trace	.689	31.746	3	43	.000	.689	
	Wilks' Lambda	.311	31.746	3	43	.000	.689	
	Hotelling's Trace	2.215	31.746	3	43	.000	.689	
	Roy's Largest Root	2.215	31.746	3	43	.000	.689	
Pre-Motivation	Pillai's Trace	.742	41.135	3	43	.000	.742	
	Wilks' Lambda	.258	41.135	3	43	.000	.742	
	Hotelling's Trace	2.870	41.135	3	43	.000	.742	
	Roy's Largest Root	2.870	41.135	3	43	.000	.742	

Group	Pillai's Trace	.748	42.551	3	43	.000	.748
	Wilks' Lambda	.252	42.551	3	43	.000	.748
	Hotelling's Trace	2.969	42.551	3	43	.000	.748
	Roy's Largest Root	2.969	42.551	3	43	.000	.748

Figure 1

Mean Scores for Posttests of Attitude, Perception, and Motivation by Group



The second research question explored how high- and low-performing learners perceived

their experiences with collaborative writing. Qualitative data were collected through reflective journals, allowing researchers to capture in-depth insights into their opinions and emotions.

Thematic analysis, a widely recognized approach in social sciences due to its structured approach (Clarke & Braun, 2013), was employed to analyze reflective journals. This method, outlined by Braun and Clarke (2006), consists of a six-phase process: familiarization, initial coding, searching for themes, reviewing themes, defining and naming themes, and writing up the findings. By systematically applying this framework, recurring themes and patterns within learners' reflections were identified (Table 4).

Table 4

Frequency and Percentage of each Theme by Low-and-High-Performing Learners

Themes	High performers		Low performers	
	Frequency	Percentage	Frequency	Percentage
Peer collaboration	50	92.5%	41	89.1%
Personal preference & individual factors	49	90.7%	40	86.9%
Impacts and outcomes	48	88.8%	38	82.6%
Language development	47	87%	38	82.6%
Efficiency and enjoyment	45	83.3%	37	80.4%
Time management concerns	42	77.7%	34	73.9%
Disagreement and challenges	17	31.4%	18	39.1%

The analysis of reflective journals revealed seven key themes that shaped learners' perspectives on collaborative writing. These themes, defined based on their content and relevance to performance levels, provided a deeper understanding of this experience:

Peer Collaboration: This theme highlights the importance of interaction, cooperation, and

mutual support among learners throughout the collaborative writing process. Learners in both groups valued teamwork and benefited from shared ideas and constructive feedback.

- Low-performing learner: *"The positive aspect was that we discussed our ideas and consulted each other while writing the text."*

- High-performing learner: *"Through a friendly and positive interaction, we created an open environment for exchanging ideas."*

A significant majority (92.5%) of high-performing learners expressed a positive attitude toward peer collaboration. They actively engaged with their group members and sought out opportunities for teamwork. Similarly, a slightly lower percentage (89.1%) of low-performing learners also held a positive view of collaboration.

Personal Preference and Individual Factors: This theme acknowledges that learners have different preferences for working individually or collaboratively, emphasizing the importance of catering to individual needs. The study found that a high percentage of both high-performing (90.7%) and low-performing (86.9%) learners enjoyed collaboration, as it gave them a sense of ownership over the writing process. Working with others allowed them to share ideas, make joint decisions, and contribute to a common goal. Additionally, individual factors such as learning style, interest, strengths, and past experiences significantly influenced their positive attitudes toward collaborative writing.

- Low-performing learner: *"Collaboration can be tricky depending on personalities. In my group, we sometimes had disagreements, but overall, it was enjoyable. Personalities definitely affect teamwork!"*

- High-performing learner: *"Working with my classmate was amazing! collaborative writing is so much better. We shared our knowledge, and I couldn't have written as well on my own."*

Both groups acknowledged that personal preferences and individual factors influenced their perspectives on collaboration. However, high-performing learners may have been more

adept at leveraging these factors to their advantage in collaborative writing tasks.

Impacts and outcomes: This theme highlights the positive effects of collaborative writing on learners' writing skills, confidence, understanding of writing concepts, and development of transferable skills. A key part of the analysis focused on the overall impact of collaborative writing on language learning. The findings revealed that high-performing learners generally achieved better outcomes from these tasks compared to their low-performing counterparts.

Approximately 88.8% of high-performing learners reported positive experiences with collaborative writing. They mentioned benefits such as improved text quality, enhanced critical thinking skills, a sense of accomplishment, and increased knowledge acquisition. For example:

- High-performing learner: *"Working with my classmate boosted our creativity and innovation. Moreover, exchanging feedback significantly improved the quality of the final text."*

While not as high (82.6%), a significant portion of low-performing learners also reported positive outcomes. Their experiences indicate that collaboration can be beneficial for all learners.

- Low-performing learner: *"Collaboration was great! It helped me see different perspectives and write a more comprehensive text. It also boosted my communication skills and confidence."*

Language development: This theme emphasizes the opportunities for language learning and development fostered through collaboration. High-performing learners generally demonstrated better language skills

than their low-performing peers. While a significant proportion (87%) of high-performing learners reported language improvement through collaboration, a similar trend was observed among low-performing learners (82.6%).

- Low-performing learner: *"I usually prefer working alone, but sometimes groups are good! I learned new words from my partner that I didn't know before."*

Interestingly, the findings suggest that high-performing learners experienced greater linguistic improvement. These advancements likely included vocabulary expansion, grammar enhancement, and overall writing proficiency. Such progress may have contributed to their positive attitudes toward collaborative writing.

- High-performing learner: *"Collaboration wasn't just about creativity; it also improved my grammar and vocabulary. Working with others actively helped me achieve better results."*

Efficiency and Enjoyment: This theme highlights the benefits of task distribution, utilizing individual strengths, and drawing inspiration from group interactions. Both high-performing (83.3%) and low-performing (80.4%) learners expressed positive views on the efficiency and enjoyment of collaborative writing. They found that working together increased their productivity, engagement, motivation, and overall satisfaction. This is likely because collaboration fosters a more interactive and dynamic learning environment.

- Low-performing learner: *"I loved this activity! It was a great and fun way to discuss and exchange ideas."*

- High-performing learner: *"Collaborative writing made me feel more engaged and confident. Working in a group, rather than alone,*

boosted my motivation, and I genuinely enjoyed it."

Although the difference between the two groups was minor, the findings suggest that collaborative writing can be significantly benefit for both high- and low-performing learners in terms of efficiency and enjoyment. This approach enables them to maximize their output and fully engage in the writing process.

Time management concerns: This theme highlights challenges related to time management and the necessity of effective planning, clear communication, and setting shared deadlines to ensure the timely completion of collaborative tasks. The study's findings indicated differences in time management skills between high- and low-performing learners. A larger portion of high-performing learners (77.7%) demonstrated effective time management strategies, compared to 73.9% of low-performing learners. This suggests that high-performing learners may be more successful in coordinating their efforts and managing time efficiently when engaging in collaborative writing tasks.

- Low-performing learner: *"We spent too much time talking because we couldn't reach an agreement. As a result, we ran out of time to actually write the text."*

However, the quotes indicate that time management can be a challenge for both groups. Some learners, such as the low-performing learners in the quote above, may get sidetracked by prolonged discussions. Nevertheless, the high-performing learner's statement suggests that effective collaboration, even when discussions take time, can lead to better outcomes.

- High-performing learner: *"Sometimes our discussions dragged on and we spent a lot of time crafting sentences, but in the end, we*

achieved better results. Overall, time management was a major challenge."

Disagreements and Challenges: This theme acknowledges the potential for differing perspectives and emphasizes the importance of open and respectful communication for successfully resolving conflicts. Despite the widespread recognition of the benefits of collaborative writing in both groups, several barriers emerged in group dynamics and teamwork. These obstacles included various challenges such as disagreements due to differing viewpoints, the presence of passive members who relied heavily on others, difficulties in reconciling diverse perspectives, disparities in group members' levels of participation, and instances where certain members exerted undue influence over the group's direction.

The study found that high-performing learners (31.4%) experienced these conflicts less frequently than low-performing learners (39.1%). More importantly, high-performing learners were more adept at managing and resolving these issues, minimizing their impact on motivation.

- High-performing learner: *"We faced some challenges while working as a team. Although we initially disagreed, we talked through our differences and ultimately reached a good outcome."*
- Low-performing learner: *"Collaboration was interesting, but my teammate tended to dominate the discussion and didn't consider opposing viewpoints."*

7. Discussion

A mixed-methods study examined the impact of collaborative writing on the attitude, perception, and motivation of Iranian language learners with different proficiency levels. The findings revealed that after engaging in

collaborative writing, both high- and low-performing learners experienced positive changes in all three dimensions. These results, which align with previous studies (e.g., [Anggraini et al., 2020](#); [Chen & Yu, 2019](#); [Pham, 2021](#); [Jalili & Shahrokhi, 2017](#); [Zhai, 2021](#)), contribute to a better understanding of collaborative learning in the context of English language education in Iran. The findings suggest that collaborative writing not only serves as an effective pedagogical tool but also transcends traditional barriers, benefiting learners at all proficiency levels.

While both high- and low-performing learners expressed positive views toward collaborative writing, quantitative data revealed significant differences in their scores. High-performing learners consistently demonstrated higher levels of attitude, perception, and motivation compared to their low-performing counterparts. This may indicate a potential interplay between prior language proficiency and the benefits derived from collaborative writing. High-performing learners are likely more receptive to peer feedback and participate more effectively in group discussions, enhancing their overall experience. Additionally, this observed difference may stem from the higher confidence levels and stronger language skills of high-performing learners, enabling them to benefit more efficiently from group activities.

The observed improvement in participants' attitudes aligns with previous research, which suggests that group writing can foster a more positive outlook toward English writing tasks (e.g., [Abahussain, 2020](#); [Alkhalaf, 2020](#); [Dobao & Blum, 2013](#); [Storch, 2013](#); [Wonglakovorn & Deerajiset, 2023](#); [Zhang, 2019](#)). This effect may be attributed to the interactive nature of collaboration, which reduces writing anxiety and

fosters a shared sense of responsibility for the final outcome. Moreover, the opportunity to receive peer feedback and engage in constructive discussions can enhance learners' self-efficacy and confidence in their writing skills.

Positive changes in learners' perceptions toward group writing resonate with studies that highlight the social and cognitive benefits of collaborative work (e.g., [Abahussain, 2020](#); [Alawaji, 2020](#); [Abahussain, 2020](#); [Chen & Yu, 2019](#); [Deveci, 2018](#); [Winarti & Cahyono, 2020](#); [Zhai, 2021](#); [Zulfikar & Aulia, 2020](#)). The collaborative setting can broaden learners' perspectives on writing as a social process and emphasize the role of negotiation and idea exchange in successful writing. Additionally, working with classmates may foster a sense of solidarity in the classroom and create a more positive perception of the learning environment.

The enhanced motivation observed in both groups aligns with the notion that collaborative writing enhances intrinsic motivation by promoting learner autonomy and a sense of ownership over the writing process (e.g., [Chen, 2021](#); [Storch, 2013](#); [Wonglakorn & Deerajviset, 2023](#); [Zhai, 2021](#); [Zhang, 2019](#)). High-performing learners may have been motivated by the opportunity to share their knowledge and skills with peers while lower-performing learners likely benefited from the scaffolding and support. The positive social interactions and sense of achievement generated through group work may have contributed to increased motivation in both groups.

The use of qualitative methods, particularly reflective journals and thematic analysis, unveiled intricate dynamics influencing learners' experiences. This approach aligns with qualitative research recommendations in

educational settings and underscores the depth and richness of data obtained through learners' narratives and perceptions ([Creswell, 2014](#)).

Qualitative analysis enriched the understanding of the topic by emphasizing the effectiveness of collaborative writing for both groups. Learners from both proficiency levels identified ease of collaboration, language skill development, increased efficiency, and greater enjoyment as valuable aspects of the practice. These findings align with the sociocultural perspective, which suggests that collaborative learning, facilitated through peer interaction and scaffolding, enhances the zone of proximal development ([Vygotsky, 1978](#)). Learners benefit from diverse perspectives and collective knowledge, leading to deeper comprehension and improved writing skills ([Storch, 2011](#); [Pishadast et al., 2024](#)).

The identification of "Peer Collaboration" as a central theme highlights the importance of interpersonal interactions, cooperative efforts, and mutual support in enhancing the collaborative writing experience. This finding is consistent with existing research that underscores the role of peer collaboration in achieving academic success and personal growth ([Lantolf & Minakova, 2021](#)). These results suggest that effective collaborative writing environments foster a sense of solidarity and collective responsibility, which are crucial for overcoming the challenges of group work ([Danli, 2011](#)).

The theme of "Efficiency and Enjoyment" clearly illustrates the benefits of task division and leveraging individual strengths in a collaborative setting. This aligns with distributed cognition theories, which suggest that collaboration can improve problem-solving skills and boost motivation ([Michaelian & Sutton, 2013](#)).

Furthermore, the emphasis on "Language Development" and "Impacts and Outcomes" reflects the multifaceted nature of collaborative writing, which extends beyond academic gains to include personal and social skills development. These findings echo broader educational goals that promote lifelong learning.

However, this study also highlighted challenges such as "Time Management Concerns," emphasizing the need for clear communication and strategic planning in collaborative writing efforts. This finding aligns with previous research, which suggests that effective time management strategies are essential for the success of collaborative projects (Deveci, 2018). Additionally, the theme of "Disagreements and Challenges" underscores the importance of addressing potential conflicts in collaborative processes and developing conflict resolution skills. This aspect is particularly relevant for educators and facilitators, as it contributes to creating a positive learning environment and fostering constructive group dynamics.

8. Conclusion

This study, conducted within a sociocultural framework, examined Iranian EFL learners' attitudes, perceptions, and motivations toward collaborative writing. The findings, obtained through a mixed-methods approach, provide a comprehensive picture of learners' engagement with this instructional strategy. While high-performing learners benefited more from its advantages, qualitative findings highlighted the overall appeal of collaborative activities. By tailoring instructional approaches and addressing potential challenges, educators can consider collaborative writing as a tool for empowering learners across all proficiency levels.

However, the results of this study should be interpreted in light of its limitations. One of the main limitations was the use of a limited sample of Iranian EFL learners, which may restrict the generalizability of the findings to learners from other regions or cultural backgrounds. Additionally, the data collection tools, including questionnaires and reflective journals, may not have fully captured all aspects of learners' experiences with collaborative writing. Furthermore, time constraints in data collection may have prevented the observation of long-term changes in learners' attitudes, perceptions, or motivation.

These limitations suggest that while the findings provide strong evidence for the effectiveness of collaborative writing, future research should employ larger and more diverse samples and utilize a variety of data collection methods to achieve a more comprehensive understanding and greater generalizability of the results.

Nevertheless, the findings of this study offer valuable insights into the complex interaction between individual and group factors in the context of collaborative writing. The results emphasize the importance of creating supportive environments that enhance peer collaboration, manage time effectively, and equip learners with the necessary skills for resolving conflicts efficiently. Future studies could explore strategies that strengthen these aspects of collaborative writing, aiming to improve learning outcomes and increase student engagement.

It is important to note that the positive changes observed in this study may vary depending on factors such as the type of collaborative writing tasks used, the group dynamics within dyads and small groups, and the teacher's role in facilitating

the process. Future research could investigate these details and explore how collaborative writing activities can be designed to enhance the learning experience of EFL learners with diverse needs and proficiency levels.

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