

Investigating the Impact of Think-Pair-Share on Saudi EFL Learners' Descriptive Writing: A Study of Perceptions, Experiences, and Confidence

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ABSTRACT

Despite challenges like time constraints, disruptions and noise, Think-Pair-Share (TPS) remains a powerful strategy for promoting active learning through critical thinking, peer collaboration, and perspective sharing. The present study, conducted at a Saudi Undergraduate University, seeks to assess the perceptions of Saudi female EFL learners regarding the Think-Pair-Share (TPS) strategy, evaluating its effectiveness as a pedagogical tool, and its associated influence on their experiences, self-confidence, and descriptive writing competence. The researcher utilized a quantitative instrument – a 25-item Likert scale (disagree-agree), to gather participant data, which was subsequently analyzed to derive statistically grounded findings reflecting their perspectives. To accomplish this, 467 female EFL learners were divided into two balanced groups: 223 received TPS-integrated instruction, while 244 engaged in traditional EFL instruction. Their performance and viewpoints were then meticulously measured through a carefully crafted instrument, providing key findings on TPS's effectiveness in improving writing skills and learner engagement. The statistical results show that the experimental group markedly outperformed the control group in descriptive writing, with post-intervention mean scores soaring past the control in all three key areas: perceptions (35.02 vs. 24.88), experiences (52.61 vs. 36.40), and confidence (21.89 vs. 15.49). These findings suggest that TPS enhances learner writing abilities and fosters a more positive and effective learning environment for descriptive writing tasks, as evidenced by the improvement in students' perceptions, experiences, and confidence.

Keywords: A study of perceptions, experiences, and confidence, investigating the impact of think-pair-share, Saudi EFL learners' descriptive writing

INTRODUCTION

Language serves as a fundamental medium through which humans convey thoughts, emotions, and intentions, thereby enabling social interaction and the construction of relationships. Catford (1965) conceptualized language as a patterned form of human behavior manifested through physical and cognitive activity, necessitating interaction between at least two individuals. Communication through language occurs across multiple modalities speaking, listening, reading, and writing. Among these, written language plays a vital societal role, from public signage to digital discourse, yet it often goes unnoticed in its significance (Ali et al., 2025). The absence of written expression would lead to a profound loss of human connectivity, historical continuity, and intellectual exchange, rendering humanity silent and detached across time and space.

Writing, as a linguistic and cognitive skill, demands mastery of grammar, vocabulary, punctuation, and creativity to communicate ideas effectively and coherently. Its development is a gradual process cultivated through learning and sustained practice. Ratnaningsih (2019) defines descriptive writing as a genre that employs vivid and sensory-rich language to construct detailed mental imagery for the reader, invoking perception through all five senses. According to Flynn and Stainthorp (2006), writing in a foreign language presents considerable challenges, requiring proficiency in lexical choice, grammatical accuracy, contextual awareness, genre conventions, tonal appropriateness, and mechanical precision. Deficiencies in these areas can hinder learners' motivation and discourage their engagement with writing tasks (Ali et al., 2025).

Within this framework, learners' descriptive writing proficiency can be enhanced through cooperative learning (CL) techniques such as the Think-Pair-Share (TPS) strategy. Lightner and Tomaswick (2017) describe TPS as a collaborative instructional approach that engages students in individual reflection, peer discussion, and collective knowledge sharing. This structured interaction promotes cognitive processing, critical thinking, and communicative competence.

The present study aims to strengthen Saudi EFL learners' descriptive writing abilities by integrating the Think-Pair-Share (TPS) strategy a pedagogical method that, despite its proven global utility, remains underexplored within Saudi Arabian educational settings. The research seeks to fill an existing gap by providing empirical evidence on the pedagogical effectiveness of TPS in enhancing descriptive writing and self-confidence among Saudi undergraduate learners.

Recent studies in Saudi Arabia have underscored the growing interest in cooperative learning approaches. Alhazmi and Elamin (2023) found that "writing circles," a form of CL, effectively fostered writing proficiency, peer interaction, and communicative development. Similarly, Alsubaie and Ashuraidah (2017) examined the use of Google Docs as a collaborative platform, reporting significant gains in student writing performance and positive learner perceptions of technology-supported collaboration. Their mixed-methods design incorporating pre- and post-tests, surveys, portfolios, rubrics, and interviews demonstrated measurable improvement in writing outcomes and engagement.

Mahmoud (2014) also reported that targeted feedback on spelling, vocabulary, grammar, punctuation, and coherence significantly improved students' post-test writing scores ($p < .001$), although some residual errors persisted. The study further highlighted learners' favorable attitudes toward cooperative learning in enhancing both general language competence and writing skills. In a related study, Al-Malki et al. (2022) explored Saudi female EFL learners' perceptions of cooperative learning, revealing notable improvements in social interaction, peer relationships, comprehension, and academic achievement.

While existing literature in Saudi Arabia has primarily focused on the influence of cooperative learning on linguistic performance, peer collaboration, and motivation, limited research has examined its impact on students' confidence and experiences in descriptive writing through the Think-Pair-Share (TPS) approach. Consequently, the present study aims to investigate the effects of TPS on Saudi undergraduate EFL learners' descriptive writing skills and self-confidence. Using a quantitative design, the research compares experimental and control groups, employing a self-confidence assessment instrument to evaluate changes in learners' confidence levels. This inquiry seeks to determine the pedagogical potential of the TPS strategy in fostering not only writing proficiency but also learners' confidence and engagement in descriptive writing tasks.

Research Question

This empirical study seeks to address the following primary research question:

1. What are the perspectives of Saudi female EFL learners regarding the impact of Think-Pair-Share (TPS) on their perceptions, experiences, and confidence in writing descriptive texts?

LITERATURE REVIEW

Think-Pair-Share (TPS) is a cooperative learning strategy designed to encourage students to tackle challenges that may exceed their individual capabilities. Rooted in the principles of mediated learning, TPS emphasizes that learning is enhanced when facilitated by more knowledgeable peers or instructors. The strategy provides flexibility,

enabling learners to engage at their own pace and style, either individually or collaboratively. Richards and Theodore (2006) highlight TPS as an effective approach for fostering collaboration in language learning. Structurally, TPS progresses through three stages: independent reflection (*Think*), paired discussion and knowledge exchange (*Pair*), and collective sharing with the broader group (*Share*). Within this social framework, learners benefit from peer scaffolding, improved comprehension through reciprocal explanation, and the integration of diverse perspectives. Consistent with Vygotsky's (1978) social learning theory, TPS situates knowledge construction within interaction, affirming that learning occurs most effectively in social contexts.

Among the four core English language skills, writing is widely recognized as the most demanding and essential to master, owing to its inherent complexity. As Widdowson (2001) observes, writing employs the visual medium to convey graphological and grammatical systems, serving both communicative and creative purposes. It enables learners to articulate their experiences and perspectives, underscoring the need for pedagogical practices that nurture this skill through opportunities for practice, constructive feedback, and guided development. Richards and Schmidt (2002) further underscore that writing is a multifaceted process comprising planning, drafting, reviewing, and revising.

Although cooperative learning has been the subject of numerous investigations in Saudi higher education, a significant gap remains. Specifically, limited research has examined the influence of TPS on Saudi female EFL learners' writing development particularly their experiences, perceptions, and confidence in producing descriptive texts.

Think Pair Share (TPS): An Evidence-Based Approach

The Think–Pair–Share (TPS) approach, introduced by Frank Lyman in 1987, is a foundational cooperative learning strategy designed to promote critical thinking, effective communication, and collaborative engagement. Central to TPS is the notion of “wait time” or “think time,” which has been shown to significantly enhance the quality of student responses. Mandal (2009) emphasizes that TPS fosters shared responsibility and reciprocal learning, enabling each participant to transition from a passive learner into an active contributor, thereby strengthening group achievement and cultivating a collaborative classroom atmosphere. Similarly, Khaghaninejad (2014) underscores the versatility of TPS, noting its applicability across diverse contexts throughout the academic year, particularly in activating learners' background knowledge. Fisher (2005) describes TPS as a reciprocal learning strategy that encourages students to build on each other's ideas, while Razak (2016) highlights its role in stimulating peer interaction and promoting active learning environments.

Empirical evidence supports the effectiveness of TPS in language learning. Siddique and Sarjit (2016) found that a cooperative learning approach to teaching essay writing outperformed traditional methods, while Raba (2017) demonstrated TPS's capacity to enhance comprehension, retention, and participation, particularly among less vocal learners. Research by Siburian (2013) further revealed that TPS significantly improved descriptive writing skills, with students' average scores showing consistent gains. In a related study, Sari (2018) reported that 79% of learners viewed TPS positively, with overall writing test scores increasing by 23.25 points following implementation. Likewise, Kusri (2012) advocated for TPS as a dynamic and structured framework that strengthens vocabulary acquisition, grammatical accuracy, and sentence construction through a sequence of individual reflection, paired dialogue, and collective sharing.

The implementation of TPS typically follows three stages (Arends, 2008). First, in the *Thinking* stage, learners engage in individual reflection, generating ideas in response to a given prompt. This phase allows them to process information, identify knowledge gaps, and prepare to articulate their ideas. As Hedley et al. (2013) observe, critical thinking often precedes writing; thus, strengthening cognitive skills during this stage is crucial for improving written expression. Second, the *Pairing* stage requires learners to collaborate with a partner to discuss and refine their ideas. This process not only exposes them to alternative perspectives but also allows the teacher to observe discussions and evaluate understanding, which in turn informs classroom instruction (Weih, 2015). Finally, in the *Sharing* stage, students present their ideas to the class. This step broadens exposure to diverse viewpoints and often reduces presentation anxiety by offering learners the support of their peers. Collectively, this three-step cycle enhances the clarity, organization, and depth of student responses, resulting in more polished and coherent output.

Descriptive Writing: A Discussion of Previous Empirical Contexts

Yusuf, Jusoh, and Yusuf (2019) argue that writing is the most challenging skill for language learners to master. Despite its difficulty, it is essential because it requires a creative process of exploring one's thoughts and adhering to proper grammar, syntax, and vocabulary standards. Nunan (2003) describes writing as the process of transforming internal thoughts into external expressions, using words to construct meaning for the intended audience. Kustati and Yuhardi (2014) noted that incorporating writing into second language acquisition programs has historically been challenging for both teachers and students. In tertiary ESL classrooms, the focus is on improving student proficiency, promoting effective communication in various contexts, and preparing them

with job-ready skills. Writing underpins all these goals and is fundamental to academic and professional success. Troyka (2010) emphasized that successful communication in writing relies on three core elements: the text or message (subject matter), the writer, and the reader as the audience.

Langan (2008) emphasizes that descriptive writing aims to create a vivid mental picture in the reader's mind through the use of language. According to Oshima and Hogue (2007), descriptive writing utilizes expressive language to craft a sensory experience, employing vivid descriptions of sight, sound, smell, taste, and texture to immerse the reader in the scene. Evawina (2010) notes that a descriptive paragraph uses lively language to paint a mental image of a person, place, or thing, employing details like color, shape, texture, sound, smell, and taste to bring the topic to life and evoke emotions. Pardiyo (2007) regards descriptive paragraphs as a form of artistic expression, where words are used to create rich, detailed portrayals of objects or feelings. Shayakhmetova et al. (2020) assert that writing is more than just a series of inscriptions; it is a complex system of coded language units that can be easily decoded and understood, playing a crucial role in human communication. Kagan and High (2002) argue that incorporating CL into writing instruction significantly improves students' writing abilities through the mutual learning and peer support found in a CL setting. Naim et al.'s 2020 study demonstrated the effectiveness of Think-Write-Pair-Share activities in enhancing writing performance and quality among tertiary students, outperforming traditional teaching methods. The limited practice of writing outside academic contexts highlights educators' vital role in teaching students the transformative skill of idea creation and articulation encompassing idea generation, organization, and clear communication, as Johnson (2008) emphasized. Mastery of grammar, spelling, and punctuation is essential for this skill, while continuous teacher support throughout the writing process fosters the development of high-quality written work.

TPS is recognized as the best method to foster critical thinking in Nigerian senior secondary students proficient in English as a second language, including skills in syntax, vocabulary, structures, and idioms. Their background in collaborative communication, reasoning, and problem-solving aligns well with the core principles of TPS, potentially leveraging these abilities to enhance critical thinking, as proposed by Gillies (2008). Haerazi et al. (2018) position writing as more than a technical exercise, describing it as a complex blend of various elements that demand grammatical accuracy and sophisticated rhetorical skills. According to Brown (2007) and Weigle (2002), EFL students often struggle with writing in all aspects, including content, organization, language use, vocabulary, and mechanics. These difficulties manifest in articulating thoughts clearly, providing evidence for claims, using proper grammar and vocabulary, and organizing ideas coherently. As a result, their writing often appears unclear, lacks persuasive power, seems unpolished and unprofessional, and can be hard for readers to understand. Similarly, Harmer (2007) observes that students at all educational levels, from primary to tertiary, face challenges in expressing their ideas effectively through written English. He argues that establishing "consistent writing routines" is key to normalizing writing and making it engaging, similar to other subjects. He recommends engaging in different writing activities, such as email interviews, genre exploration, and postcard exchanges. These diverse exercises, which include both individual and collaborative formats, provide engaging opportunities for students to refine their written expression.

Building Descriptive Writing Confidence through TPS

Reinhart (2002), a middle school math teacher conducted a self-study of his classes over several years, experimenting with problem-based, student-centered, and cooperative learning techniques to improve his teaching. He found that direct instruction was not effective for all of his students. He argues that students learn better when they are actively involved in the learning process and when they have opportunities to explain their reasoning. He provides many tips for creating a classroom environment where students are willing and feel comfortable sharing their thoughts. One of his recommendations is to use the TPS cooperative learning strategy. In like manner, Cortright et al. (2005) devised a cooperative learning technique called peer instruction, which is similar to TPS. The study was conducted in an undergraduate class to examine the effectiveness of peer instruction and found that strategy significantly improved students' mastery of the material and their ability to solve novel problems. Juhana (2012) found that students are less likely to speak in class if they are shy, anxious, afraid of making mistakes, lack confidence, or feel unmotivated. Within this framework, Singh et al. (2020) reported that the students in 4 Lambda were reluctant to engage with the class in English, often choosing to speak Malay instead. In a 2014 study, Farzaneh et al. surveyed 52 EFL students at Gouyash language school to investigate the effects of CL on language learning. The study found that the CL strategy had a positive impact on student learning, as students reported feeling more confident studying in groups.

Concerning this, Bandura's (1989) social cognitive theory is a tapestry woven from three threads: behaviors, personal factors, and environmental influences. These threads are intertwined and constantly influence each other, shaping our thoughts, feelings, and actions. Similarly, Woolfolk (2011) noted that student learning is affected by a complex mix of factors. These include behaviors, and personal aspects such as cognition, goals, and self-efficacy, along with environmental elements like models, instruction, and feedback. He enlarged on it that CL pairs up

students to share their thoughts and learn from each other, like a reciprocal interaction, students can receive and give feedback, model good behavior, and learn from each other's perspectives (environmental factor). This would nurture the student's inner growth and development, helping them to gain a deeper understanding of the topic (personal factor). In the end, a student's expanded understanding and new insight into the topic may ignite a spark of curiosity and confidence, motivating them to raise their hand and share their thoughts with the class (behavior). When a student receives recognition for their accomplishments and helpful contributions to class dialogue, it can boost their self-confidence, which is their belief in their ability to succeed. This helps them feel more confident in their ability to contribute to class discussions and ultimately succeed in the course, confirming Woolfolk's conclusion that CL helps students learn from each other, gain confidence, and feel more successful.

Unveiling the TPS: A Step-by-Step Process

The Think–Pair–Share (TPS) strategy is a cooperative learning approach that unfolds in three stages: individual reflection, partner discussion, and class-wide sharing. This instructional method fosters critical thinking, collaborative engagement, and effective communication among learners. In the present study, the experimental group participated in an eight-week intervention program employing TPS, with each week devoted to a distinct topic. The intervention was implemented from the third to the tenth week of the fall semester. During this period, students practiced descriptive writing through a series of essay tasks on varied themes. For example, participants composed descriptive essays about memorable landscapes in their hometowns or locations they had visited, emphasizing the significance of these places and evoking them through sensory details. Similarly, students wrote about memorable individuals, highlighting the qualities that made them remarkable and supporting their descriptions with anecdotes. Other assignments included reflections on meaningful experiences, such as moments of happiness, gratitude, or intercultural encounters, where students explored the significance of these events and articulated their emotional responses. Additionally, learners described personally significant objects, particularly those with historical or sentimental value, narrating their relevance through detailed accounts and stories.

In line with Siburian (2013, p. 35), the TPS implementation followed a structured process: (1) students were organized into groups of four and assigned individual numbers (1–4) to ensure equal participation and facilitate partner pairing; (2) learners received a descriptive writing task, such as portraying a favorite place vividly and in detail. This task was appropriate to their age, proficiency level, and curricular unit (Cambridge *Unlock* Second Edition). A minimum wait time of 10 seconds was provided before students responded, as previous research has demonstrated that adequate wait time enhances the quality of student contributions (Argawati & Suryani, 2017; Syafii, 2018; Hetika et al., 2017); (3) partners were then assigned based on numbering (e.g., 1 with 2, 3 with 4) to maximize efficiency; (4) learners collaborated with their partners to exchange perspectives and consolidate their ideas. Subsequently, a subset of students was randomly selected to present their responses to the class, either by writing on the board or constructing diagrams.

Overall, findings suggest that TPS supports students in developing a deeper understanding of subject matter, refining their ability to analyze and evaluate information, and considering diverse viewpoints.

METHODOLOGY

Research Design

The researchers utilized a true experimental design to investigate the impact of TPS on the perceptions, experiences, and confidence of 467 Saudi female EFL learners enrolled in an undergraduate program at a Saudi University, with 223 participants in the experimental group and 244 in the control group. A data collection instrument consisting of a structured questionnaire was implemented to evaluate the perceptions of the experimental and control groups, employing quantitative measures to analyze and cross-check their viewpoints.

Participants

A random sampling technique was implemented to draw a representative sample of participants, facilitating the generation of unbiased data. An Arabic translation of the questionnaire was developed and distributed to 467 Saudi female EFL learners enrolled in an undergraduate program at a Saudi University, ensuring accurate understanding and responses from all participants.

Instrumentation

Drawing from previous research conducted in similar contexts, the researchers developed a tool optimized for collecting valuable feedback from participants (see, for example, Sari, 2018; Sampsel, (2013); Hamzah & Faisal, 2021; Naim et al., 2020; Akinwamide & Oguntade, 2023; Mundriyah & Parmawati, 2016). A 25-item Likert-scale survey with closed-ended statements was developed to study the relationship between three independent variables and twenty-five dependent variables. The items of the survey were displayed in three tables, one for each independent variable.

Validity and Reliability

To assess the quality of the questionnaire items and ensure that they accurately measure the intended concept, the first draft of the survey was sent to three experts in the field for their review. Their feedback was then used to refine the survey items and improve the overall quality of the instrument. The modified tool was translated into Arabic and tested with a pilot group of 25 EFL learners from Saudi Undergraduate University. The purpose of this pilot test was to evaluate the tool's usability, clarity, and effectiveness with this target population. The data collected from the pilot test was manually entered and analyzed using Cronbach's Alpha to assess the reliability of the instrument. The results of the pilot test revealed that the instrument was reliable ($\text{Alpha} = .905$). Therefore, the final version of the instrument was employed to gather data from the participants.

Table 1. Reliability coefficient

Number of Cases	25
Number of Items	23
Cronbach's Alpha	.905

Measures and Data Collection

The learners' responses to the questionnaire provided valuable insights into their perceptions, experiences, and self-confidence related to writing descriptive text. A five-item self-confidence scale developed by Sampsel (2013) was incorporated into the study. This study employed a previously developed questionnaire instrument, initially created by Izza (2015) and subsequently utilized by Sari (2018), to assess the impact of the TPS on student perceptions, experiences, and self-confidence. A 25-item questionnaire, employing a five-point Likert scale, served as the primary data collection instrument in this study, enabling the exploration of students' perspectives, experiences, and self-confidence.

The researchers employed established procedures to ensure the instrument's validity and reliability. A total of (Experimental=223 + Control=244) 467 Saudi female EFL learners enrolled in an undergraduate program at a Saudi Undergraduate University participated in this study. The data was collected through a 25-item survey utilizing a strongly-disagree to strongly-agree Likert scale. An Arabic translation of the research tool was developed to enhance participants' understanding and facilitate their engagement with the study. Out of the initial sample ($n=480$), only 467 learners completed the questionnaire, resulting in 223 participants in the experimental group and 244 respondents in the control group.

Data Analysis

The researchers carefully coded and manually entered the 467 valid responses, and then thoroughly analyzed the data. The results, consistent with the CFA-Measurement Models for both experimental and control groups (presented in the tables), revealed a direct correlation between higher item mean values and stronger participant preferences. A comprehensive analysis of these statistics, coupled with relevant findings from previous studies, will be provided in the "Results and Discussion" sections.

RESULTS

The present analysis considered the univariate and multivariate normality of the observed variables, as maximum likelihood estimation is predicated upon this assumption (Tabachnick & Fidell, 2013). Despite the non-normality of the data in its multivariate form, the proposed model was evaluated using ML techniques through the AMOS 24 software. Analysis of the individual items revealed values for skewness and kurtosis that were consistently below the suggested cut-off points outlined by Kline (2010), supporting the conclusion of univariate normality for all items. Analysis of the data's multivariate normality utilizing AMOS 24 yielded a Mardia's coefficient of 109.372, surpassing the benchmark established by Raykov and Marcoulides (2008).

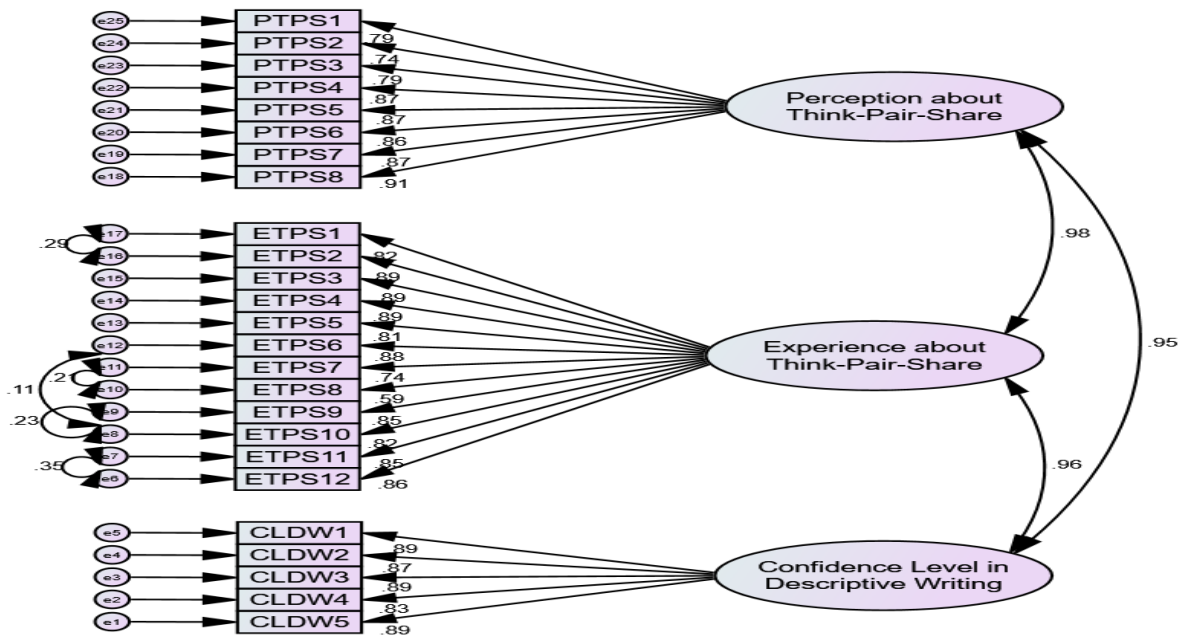


Fig 1: CFA-Measurement Model (Control Group)

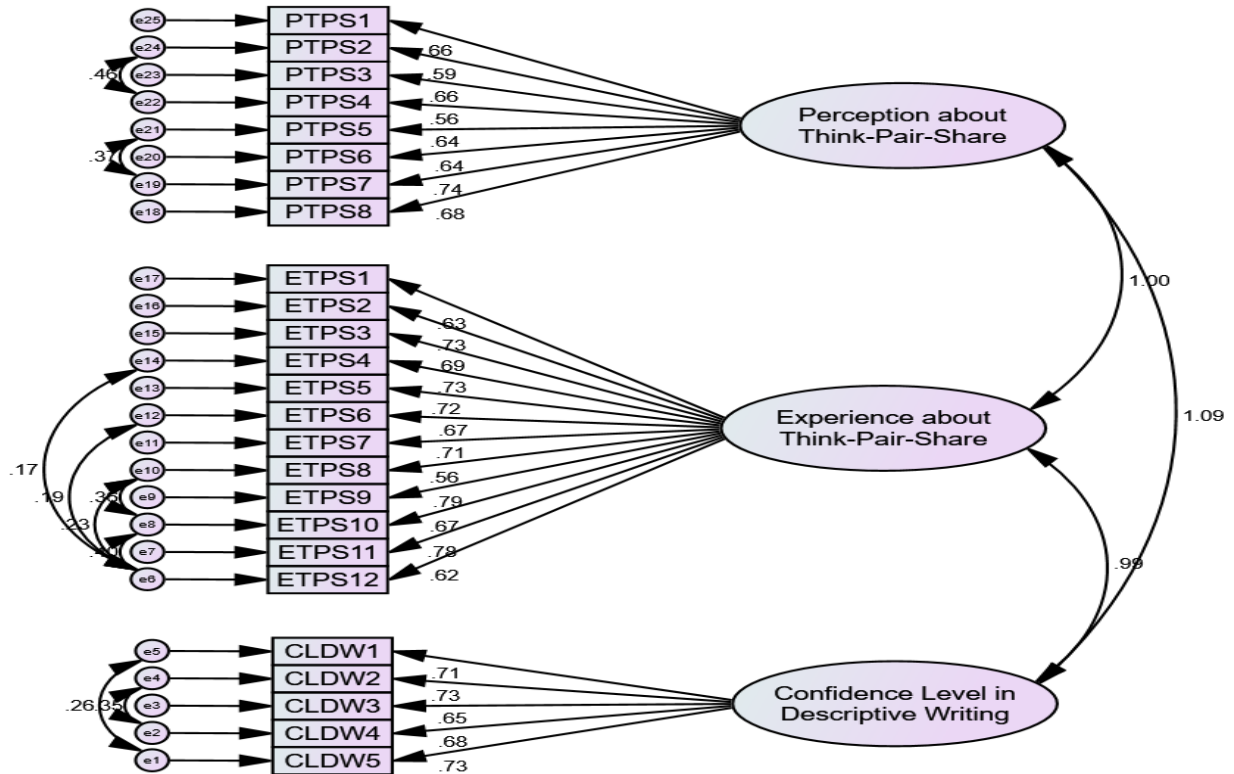


Fig 2: CFA-Measurement Model (Experimental Group)

Table 2. Measurement Model

Items	Control Group					Experimental Group				
	Loadin	Cronbac	CR	AV	E	Loadin	Cronbac	CR	AV	E
	gs	h's α				gs	h's α			
(PTPS)	-	.951	.94	.763		-	.895	.94	.771	
			2					6		
PTPS1	.79					.81				
PTPS2	.74					.80				
PTPS3	.79					.80				
PTPS4	.87					.87				
PTPS5	.87					.91				
PTPS6	.86					.91				
PTPS7	.87					.89				

	PTPS8	.91				.92			
	(ETPS)	-	.965	.96	.773	-	.920	.97	.783
	ETPS1	.82				.93			
	ETPS2	.89				.92			
	ETPS3	.89				.92			
	ETPS4	.89				.90			
	ETPS5	.81				.85			
	ETPS6	.88				.82			
	ETPS7	.74				.91			
	ETPS8	.59				.91			
	ETPS9	.85				.93			
0	ETPS1	.82				.90			
1	ETPS1	.85				.88			
2	ETPS1	.86				.87			
W)	(CLD	-	.942	.95	.808	-	.841	.95	.867
1	CLDW	.89				.88			
2	CLDW	.87				.88			
3	CLDW	.89				.90			
4	CLDW	.83				.91			
5	CLDW	.89				.93			

Utilizing a 25-item instrument measuring Confidence in Descriptive Writing (CLDW), the measurement model established three latent variables: Perceptions of TPS (PTPS), Experiences of TPS (ETPS), and a distinct Confidence Level in Descriptive Writing construct. The study assessed the 25 items' ability to measure distinct (discriminant) and overlapping (convergent) constructs. To determine the internal consistency of the measures used for each concept, and ensure they effectively capture the intended construct, the study employed three established metrics: average variance extracted (AVE), composite reliability, and item reliability, as recommended by Fornell and Larcker (1981). The loadings for each item that is, the correlation between the items and their corresponding constructs were used to evaluate the dependability of the items. Hair et al. (2010) claim that because Cronbach's alpha tends to underestimate reliability, composite reliability was chosen in its place. In terms of dependability regarding reliability at the item level, the minimum requirement suggested for factor loading is .70.

Table 2 reports the item loadings, composite variance, and extracted average variance. At the construct level, Nunnally and Bernstein (1994) suggested that a minimal alpha reliability of .70 be met to indicate sufficient dependability. All three constructs met the recommended minimum value of .70, as Table 2 demonstrates. The measure of the average variance extracted (AVE) for each factor was the last criterion for convergent validity that was applied. A minimal value of .50 for AVE was suggested by Nunnally and Bernstein (1994) and Fornell and Larcker (1981). The analysis's findings demonstrated that all of the scales' AVE values were higher than .50. Thus, for both the control and experimental groups, the measurement properties met all three required convergent validity criteria.

Table 3. Inter-Construct Correlations and Square Root of AVE (Fornell–Larcker Criterion)

Group	Construct	Confidence Level	Experience about TPS	Perception about TPS
Control	Confidence Level	(0.874)		
	Experiences	0.857**	(0.879)	
	Perceptions	0.849**	0.878**	(0.883)
Experimental	Confidence Level	(0.880)		
	Experiences	0.877**	(0.889)	
	Perceptions	0.858**	0.888**	(0.890)

p < 0.01, * p < 0.001

Note. The square roots of the average variance extracted are indicated by the items in bold and parenthesis on the main diagonal.

The next stage in evaluating the measurement properties was to test for discriminant validity. The inter-construct correlations and the square root of the average variance retrieved are displayed in Table 3. As can be observed from the data in Table 2, the square root of the AVE is higher than the inter-construct correlation for each construct, strengthening the discriminant validity. Therefore, discriminant validity might be obtained for both groups.

Table 4. *Model Fit Indices for Control & Experimental Group*

Fit Indices	Control Group		Experimental Group	
	Values	Model Fit	Values	Model Fit
χ^2/df	2.77	acceptable	2.48	acceptable
GFI	.91	acceptable	.93	acceptable
AGFI	.90	acceptable	.91	acceptable
TLI	.92	acceptable	.94	acceptable
CFI	.93	acceptable	.92	acceptable
RMSEA	.078	acceptable	.066	acceptable
SRMR	.031	acceptable	.028	acceptable

AMOS 24.0 was used to test the measurement models in Figures 1 and 2 using the structural equation model (SEM) technique. Several fit indices were employed to gauge model fit, as advised by Hair et al. (2010), Harrington (2009), and Kline (2010) respectively. The study's model fit results, which are shown in Table 4, show that the research model does a reasonable job of fitting the data.

Table 5. *Participants Perceptions, Experiences, and Confidence Levels in Descriptive Writing Using Think-Pair-Share*

Variables	Cont. Group		Exp. Group		$t(461)$	p	Cohen's d
	M	SD	M	SD			
Perceptions about TPS	24.88	9.06	35.02	3.87	-15.39	< .001	1.46
Experiences of Students about TPS	36.40	13.38	52.61	6.21	-16.57	< .001	1.56
Confidence Level for Descriptive Writing	15.49	6.04	21.89	2.58	-14.58	< .001	1.38

Note. M = mean, SD = standard deviation, t = t -statistic, p = p -value, Cohen's d = effect size.

Table 5 revealed that participants from the Control Group ($M = 24.88$, $SD = 9.06$) reported significantly lower perceptions of descriptive writing using TPS compared to those from the Experimental Group ($M = 35.02$, $SD = 3.87$), $t(461) = -15.39$, $p < .001$, Cohen's $d = 1.46$. A significant difference was found in the experiences of students about the TPS between Control Group ($M = 36.40$, $SD = 13.38$) and Experimental Group ($M = 52.61$, $SD = 6.21$), $t(461) = -16.57$, $p < .001$, Cohen's $d = 1.56$. Students from the Control Group ($M = 15.49$, $SD = 6.04$) reported significantly lower confidence levels for descriptive writing compared to those in the Experimental Group ($M = 21.89$, $SD = 2.58$), $t(461) = -14.58$, $p < .001$, Cohen's $d = 1.38$.

The analysis revealed statistically significant differences in student perceptions, experiences, and confidence related to the application of the TPS strategy in descriptive writing instruction. These findings suggest a multifaceted impact of TPS, potentially mediated by the specific contributions of its 'think,' 'pair,' and 'share' components. Further research is necessary to elucidate the nuanced mechanisms through which each element of TPS influences student engagement, learning outcomes, and proficiency in descriptive writing.

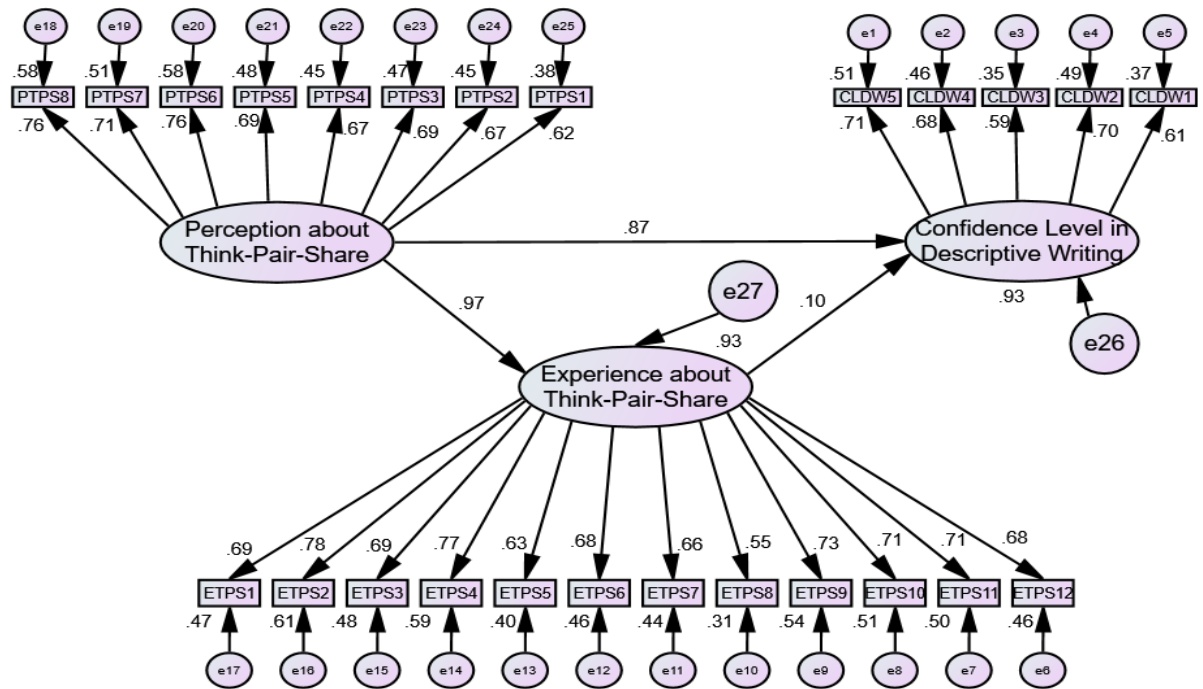


Figure 3: Structural Model-Multigroup Path Analysis (Control Group)

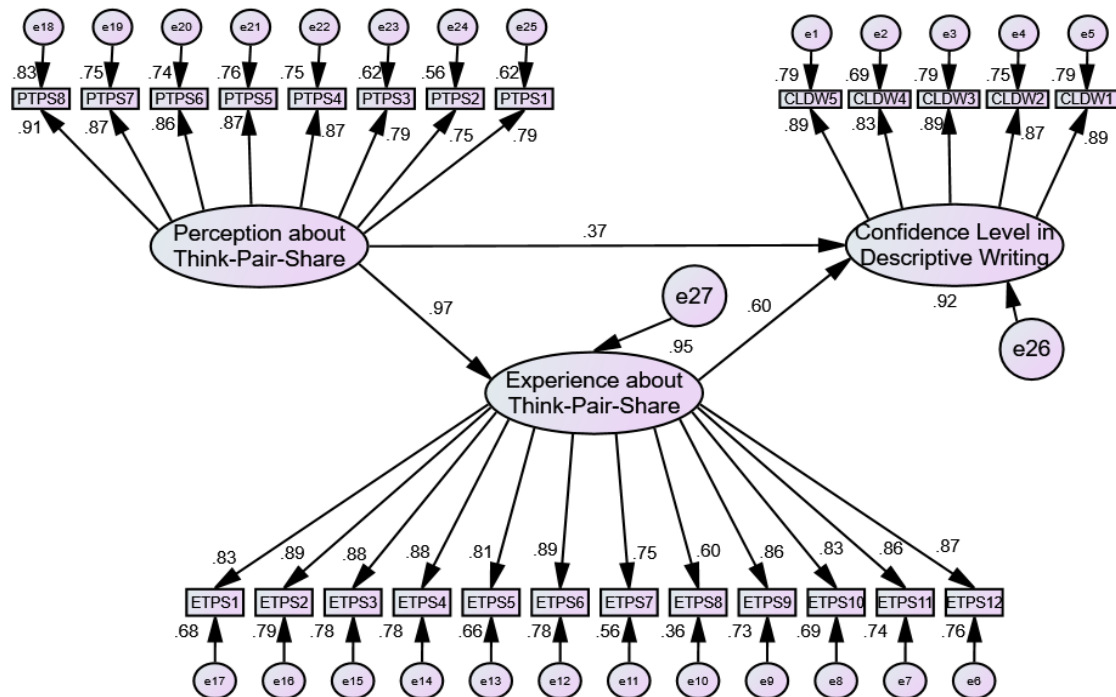


Figure 4: Structural Model-Multigroup Path Analysis (Experimental Group)

Table 6. Structural Model (Multigroup Path Analysis)

	Hypothesized Relationships	Standardized Estimates	t-value	p-value	Decision
Control Group	H1: PTPS => CLDW	.861	12.18	< .001	supported
	H2: PTPS => ETPS	.967	4.67	< .001	supported
	H3: ETPS => CLDW	.096	.600	.549	Not supported
	Model Fit				
	CMIN/df = 2.31, GFI = .90, AGFI = .88, TLI = .90, CFI = .91, SRMR = .030, RMSEA = .073				
Experimental Group	Hypothesized Relationships	Standardized Estimates	t-value	p-value	Decision

H1: PTPS => CLDW	.374	1.38	< .050	supported
H2: PTPS => ETPS	.973	4.86	< .001	supported
H3: ETPS => CLDW	.602	3.09	< .001	supported
Model Fit				

CMIN/df = 2.02, GFI = .93, AGFI = .91, TLI = .91, CFI = .89, SRMR = .024, RMSEA = .060

Significant Differences between the Control and Experimental Groups

A rigorous multigroup analysis conducted in AMOS 24 illuminated a profound divergence in the structural configurations underpinning the experimental and control groups in the structural models shown in Figures 3 and 4. This disparity manifests in the contrasting patterns of standardized parameter estimates across hypothesized relationships.

Confidence in Descriptive Writing is Significantly Affected by Positive Views of the TPS

Table 6 displays the path coefficients from the control group model (Figure 3) which showed a strong positive correlation ($\beta = .861$, $p < .001$) between the confidence level for descriptive writing and positive perceptions about think-pair-share (TPS). This result implies that students' self-confidence in writing descriptive essays is directly increased by having a positive attitude toward TPS. Furthermore, it was found that favorable opinions of TPS were substantially linked to favorable experiences employing the technique ($\beta = .967$, $p < .001$), suggesting that students with favorable opinions of TPS are more likely to have favorable experiences with its application.

Experience with TPS Contributes to Confidence in Descriptive Writing

In the control group, however, the path coefficient ($\beta = .096$, $p < .549$) between the confidence level in descriptive writing and positive experiences with TPS did not reach statistical significance. This shows that when students have not received explicit instruction on how to use TPS appropriately, their personal experiences with it may not significantly influence their confidence in descriptive writing.

Experimental Group Results Demonstrate Enhanced Confidence and Experience with TPS

In contrast, it was discovered that within the experimental group, all three of the proposed relationships were statistically significant. These findings highlight the benefits of using TPS in writing instruction. More specifically, it was discovered that favorable opinions of TPS positively impacted students' experiences using TPS as a descriptive writing strategy ($\beta = .967$, $p < .001$) and significantly increased confidence levels for descriptive writing ($\beta = .861$, $p < .001$).

TPS Promotes Confidence and Enhances Learning Experience

The study's results provide strong evidence that positive perceptions of TPS significantly enhance both students' experiences using it as a descriptive writing strategy and their confidence in writing. Furthermore, the results show no significant correlation between the confidence level for descriptive writing and the personal experiences of students who were not explicitly taught TPS. These observations demonstrate how successful TPS is as a teaching strategy for building student confidence and improving descriptive writing learning.

DISCUSSION

This study examined the impact of TPS on Saudi EFL learners' perceptions, experiences, and confidence regarding descriptive writing. The results demonstrated that TPS instruction resulted in notably positive effects across all three domains within the experimental group compared to the control group. These findings suggest that TPS holds substantial promise as a valuable pedagogical tool for enhancing the descriptive writing skills of Saudi EFL learners. The study's findings are consistent with those of Syahputra and Ginting (2012), highlighting TPS's powerful capability to improve CL and foster a shared understanding of descriptive writing. Scores surged from 66 to 87, mirroring the positive student attitudes and active engagement observed during TPS implementation. Interviews and surveys further underscored TPS's efficacy in unlocking descriptive writing skills among young learners.

Table 7. *Saudi EFL Learners' Insights/Perceptions Regarding Writing Descriptive Texts*

Statements	Exp.+ Control (Total)	Mean Control	Mean Expr.
The mean perception levels of learners in the control and experimental groups.	N=467	24.88	35.02

1. I like writing descriptive texts in English.
2. I have no difficulty in writing descriptive text in English.
3. A more engaging technique is needed in learning to write descriptive texts.
4. Learning to write descriptive text using the TPS technique is quite effective.
5. Learning to write descriptive text using the TPS technique is quite interesting
6. The TPS technique is very suitable for learning to write descriptive text.
7. In my opinion, discussing with partners can help me write descriptive text in English.
8. A more engaging technique is needed in learning to write descriptive texts.

The study revealed a marked disparity in descriptive writing perceptions, with active TPS participants in the experimental group exhibiting demonstrably more positive orientations than the control group. This suggests that TPS instruction can effectively cultivate positive student attitudes toward descriptive writing, highlighting its potential as a pedagogical tool. Drawing upon the investigative framework of Nazilah et al. (2021), whose findings resonate with the present study, it becomes evident that the TPS, characterized by its interactive and collaborative essence, fosters a fertile ground for peer-to-peer learning and the exchange of constructive criticism. This dynamic exchange, is postulated, plays a pivotal role in shaping and solidifying students' positive perceptions of the learning process. In 2015, Usman's study thoroughly examined the impact of the TPS strategy on spoken language proficiency at STAIN Ternate. Employing a multi-cycle pre-test/post-test design, it revealed statistically significant improvement between cycles, exceeding established benchmarks in Cycle 2. Notably, post-intervention "good" scores on a spoken test substantially increased, strengthening the case for TPS's effectiveness. While further sub-skill analysis is warranted, his research offers convincing evidence for TPS as a potent tool for boosting fluency and oral communication, highlighting its transformative potential in language classrooms. The participants praised cooperative learning for boosting their writing, echoing findings by Sahardin et al. (2017) and Yusuf et al. (2019). Instead of raising their hand in front of the entire class, participants in the CL group found themselves surrounded by a web of instant support. In CL, everyone works together like a team, ensuring that no student is left behind in a group and that everyone must help each other to solve their task.

Table 8. Saudi EFL Learners' Experiences with Think-Pair-Share as a Strategy for Writing Descriptive Texts

Statements	Exp.+ Control (Total)	Mean Control	Mean Expr.
The mean experience levels of learners in the control and experimental groups.	N=467	36.40	52.61
9. I have no difficulty using the Think Pair Share technique.			
10. The TPS Technique helps me overcome difficulties in writing descriptive text.			
11. Learning using the TPS technique is more fun than usual learning.			
12. Learning to use the TPS technique needs to be used in subsequent classes.			
13. Learning to write descriptive text using the TPS technique is quite interesting			
14. I feel more comfortable when I study by discussing with other students.			
15. I prefer to be taught by teammates rather than by an English teacher.			
16. I find it challenging to concentrate when studying in pairs.			
17. Collaborating with other students improves my writing skills in English rather than studying alone.			
18. Studying in groups doesn't waste my time.			
19. Studying in groups allows me in class to practice new vocabulary.			
20. Teaching friends can improve my ability to write descriptive text in English.			

Student self-reported experiences in the experimental group, analyzed in comparison to the control group, demonstrated a statistically significant preference for the TPS strategy. The demonstrably successful student utilization of the TPS strategy underscores its pedagogical efficacy. These findings echo those of Ariani et al. (2018), suggesting a potential causative link between TPS implementation and creating a supportive and collaborative learning milieu conducive to knowledge exchange and peer-assisted learning. In a 2018 study, Sari meticulously investigated the multifaceted impact of the TPS method on student writing proficiency. The research targeted two primary objectives: (1) identifying the specific aspects of writing most receptive to the TPS technique's influence, and (2) evaluating student engagement and affective response to its implementation. The findings demonstrated compelling evidence of a positive association between the implementation of TPS and improved writing skills. This outcome further validates the efficacy of TPS as a pedagogical tool for optimizing student writing outcomes. Haerazi et al. (2020) assert that writing, far from being an isolated activity, originates from social and cultural contexts, functioning as both a reflection and a shaping force of our shared experiences and aspirations. Sanjaya's (2013) investigation, unveils a noteworthy trend in student attitude towards the TPS technique as an instructional tool for composing descriptive texts. Among respondents, a substantial majority (76.23% - 33.1% strongly agreeing + 43.13% agreeing) expressed positive sentiment, indicating their clear enjoyment and interest in the method. This

overwhelming endorsement is further emphasized by the negligible presence of neutrality (3.75%) and the complete absence of any disagreement or strong disagreement with positive statements about TPS. These findings strongly suggest a high degree of resonance between the TPS technique and student preferences, significantly enhancing their engagement and enjoyment within the writing process, particularly when crafting descriptive texts.

Table 9. *Saudi EFL Learners' Perspectives on Their Confidence in Writing Descriptive Texts*

Statements	Exp.+ Control (Total)	Mean Control	Mean Expr.
The mean confidence levels of learners in the control and experimental groups.	N=467	15.49	21.89
21. I enjoy sharing my thoughts and observations during class discussions in my English class.			
22. I feel confident in my ability to contribute to discussion in English class.			
23. I feel confident in my ability to write descriptive texts.			
24. I often participate in class discussions in English class.			
25. I am comfortable contributing to class discussions in English class.			

Compared to their control group counterparts, students trained in the TPS method displayed a remarkable upsurge in confidence when it came to descriptive writing. This study's confidence gains in writing align with Bunaya's (2019) findings, who observed a similar rise in confidence amongst students using the TPS technique for honing their speaking skills. In essence, TPS appears to nurture both the technical aspects of descriptive writing and the self-assurance needed to wield them effectively. Students overwhelmingly embraced TPS as a highly effective learning method aligning with Astuti and Lammers's (2017) findings. Its emphasis on individual accountability within collaborative settings empowered students to diligently engage, nurturing a potentiating drive for collective success. This strengthened teamwork, leading to greater learning satisfaction and social skill development. Strikingly, TWPS facilitated social integration, enabling shy students to blossom through improved communication skills. The supportive environment nurtured deeper connections and empowered active student participation, while also reinforcing tolerance for diverse perspectives, genuine peer support, and overall emotional well-being. At its core, TWPS emerges as a powerful pedagogical tool, effectively boosting both academic and social-emotional learning outcomes. Beyond skill development, TPS ignites students' intrinsic motivation to write in English, akin to findings by Mendo-Lazarro (2018) and Buchs (2015). Student reports indicate a heightened sense of confidence in expressing opinions freely within the supportive TWPS environment. The TP's collaborative structure undeniably mitigated student anxieties around error and social censure, fostering unrestrained expression.

Multigroup Analysis

The multigroup analysis revealed significantly stronger associations within the experimental group between positive perceptions of TPS, engagement experiences, and confidence in descriptive writing. This suggests that explicit TPS instruction fosters favorable attitudes and lived experiences with the strategy and enhances students' self-confidence in their descriptive writing abilities. Building upon prior investigations, Fauziah et al. (2023) offer a nuanced exploration of the multifaceted influence of TPS on the construction of students' confidence in descriptive writing skills.

Implications for EFL Instruction

The results of this study have several significant ramifications for teaching EFL. First, the results suggest that EFL instructors should incorporate the TPS strategy into their writing lessons to foster positive perceptions, experiences, and confidence in EFL learners' descriptive writing abilities. Second, the results imply that opportunities for peer-to-peer learning, constructive criticism, and metacognitive reflection should be explicitly included in the design of TPS instruction. Fauziah et al. (2023) reported similar findings regarding the use of TPS for EFL instruction.

Limitations and Future Directions

Despite its valuable insights, this study has certain limitations: 1) potential context specificity due to a single Saudi EFL sample, 2) potential bias in self-reported experiences and perceptions, and 3) lack of investigation into long-term effects on descriptive writing abilities. Future research should solidify TPS's impact in EFL writing by venturing beyond current limits: exploring diverse contexts, wielding objective gauges of perception and confidence, tracking skill development over time, and unlocking TPS's cognitive mechanisms for targeted optimization.

CONCLUSION AND RECOMMENDATIONS

This study showcases the efficacy of TPS in cultivating a supportive learning environment that nurtures writing skills development, positive perceptions, enriching experiences, and enhanced confidence among EFL learners at a Saudi Undergraduate University. The results indicate that the experimental group outperformed the control group, compared to the control's initial mean score (24.88 on perceptions, 36.40 on experiences, and 15.49 on confidence), the experimental group secured a mean value soaring to 35.02 in learners' perceptions, 52.61 in their experiences, and a 21.89 in self-belief. These figures paint a fascinating picture of the intervention's impact, revealing its capacity to cultivate a robust sense of self-confidence alongside knowledge transmission among learners.

The students' descriptive writing ability honed throughout the course, evident in their steadily rising scores across each writing cycle. From a promising 69.06% on the first quiz, they climbed to a confident 83.53% on the midterm, and finally soared to an impressive 93.33% on the final. This upward trajectory sketches a clear picture of their growing ability to compose an insightful and engaging text. In addition, a positive shift in student behavior, characterized by active participation, thoughtful contributions, and enthusiastic responses throughout the teaching and learning process. The robust findings lend substantial credence to the proposition that the TPS method convincingly potentiated student performance in the context of descriptive writing.

The TPS strategy significantly influences descriptive writing skills through several key mechanisms. First, TPS gives students the chance to participate in peer-to-peer learning, which can aid in the development of their descriptive writing abilities through feedback and teamwork. Second, the TPS framework fosters an environment of rigorous critique that assists students in recognizing and fixing their writing mistakes. Third, the TPS framework facilitates a cyclical process of introspection and action, prompting students to engage in metacognitive analysis of their writing practices and implement modifications for enhanced efficacy.

Unveiling the true potential of TPS in enhancing undergraduate learners' writing proficiency requires future research that examines its effectiveness with different sample groups and across various academic disciplines, providing a more robust assessment of its true potential. Based on the comprehensive analysis of the study participants' data, the researchers urge for the implementation of the following recommendations: 1) To help EFL learners cultivate positive perceptions, enjoyable experiences, and self-confidence in EFL descriptive writing, instructors should integrate the TPS into their writing instruction. 2) Future studies should look into the long-term effects of TPS instruction on EFL learners' descriptive writing skills and investigate its efficacy in different writing aspects, for instance; content, organization, vocabulary, grammar, and mechanics. The findings of Sahardin et al.'s (2017) study reveal compelling evidence of substantial improvements in students' mastery of organizational skills, lexical breadth, and content knowledge. 3) The TPS instruction should be specifically designed to give students opportunities for peer-to-peer learning, constructive feedback, and metacognitive reflection.

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