

Navigating Group Conflict: Gender Differences in Emotional and Strategic Responses During Storming Phase Among ESL Undergraduates

Nur Syafiqah Abdul Kadar¹, Aisyah Hani Mohd Habali^{2*}, Wan Syariza binti Wan Yadri³, Amir Lukman Abd Rahman⁴

^{1,2,3} Centre of Foundation Studies, Universiti Teknologi MARA, Cawangan Selangor, Kampus Dengkil, Dengkil 43800, Selangor, Malaysia.

⁴ Akademi Pengajian Bahasa, Universiti Teknologi MARA, 40450 Shah Alam, Selangor, Malaysia

***Corresponding Author**

DOI: <https://doi.org/10.47772/IJRISS.2026.100500746>

Received: 11 May 2026; Accepted: 16 May 2026; Published: 12 June 2026

ABSTRACT

Collaborative work is a common practice in tertiary education, enhancing learning outcomes by fostering deeper engagement and helping students upskill their potential. However, gender-related differences in emotional involvement and conflict management may influence the dynamics of group work. While students often navigate conflicts that arise during the group development stages—forming, storming, norming, and performing—collaborative work remains a valuable pedagogical approach. Given the limited studies addressing differences in perceived experiences between males and females, gender-related dynamics in group work remain underexplored. Therefore, this study aims to explore learners' perceptions of group work stages across gender. A quantitative approach was employed using Tuckman's Teamwork Survey (2016), with data collected from 176 tertiary-level students. Analysis using ANOVA revealed no statistically significant differences between male and female students in managing conflict across all group work stages. Nonetheless, subtle differences were observed in emotional involvement and group conflict, suggesting gender-based variations in group interactions. These findings can assist educators in tailoring instructional strategies and scaffolding student development in conflict resolution. Future research should incorporate variables such as personality traits, cultural background, and communication styles to deepen our understanding of gendered group dynamics in collaborative learning, particularly in ESL contexts.

Keywords: Group work, Collaborative learning, Gender differences, Group conflict

INTRODUCTION

Group dynamics are critical to the success and effectiveness of any group or team. Understanding the relationships among the various components of a group is essential for effective cooperation, decision-making, and overall group performance (Othman et al., 2023). In the context of group work, members can contribute in diverse ways to the group's process, defined as the approach and interaction among students working together to achieve a common goal (Forsell et al., 2020). These interactions can lead to varying types of conflicts, which are a natural part of group dynamics.

In Malaysia, where English as a Second Language (ESL) is a significant component of the education system, comprehending group conflicts among ESL learners is particularly relevant. The Malaysian education system emphasizes collaborative learning to enhance language proficiency and communication skills among students. This emphasis is reinforced by the Malaysian Education Blueprint (2013-2025), which highlights the importance of collaborative learning. To ensure the transformation of the Malaysian education system is effective and sustainable, the blueprint advocates for increased project-based and group-based work to develop students'

higher-order thinking skills and their ability to work both independently and collaboratively (MOE, 2013). Understanding how these group processes and conflicts unfold, especially in terms of gender differences, can provide valuable insights for educators to foster more effective and harmonious group interactions.

Previous research has indicated significant disparities between the ways boys and girls handle conflict when it arises (Sedgewick et al., 2019). It has also been shown that females tend to use a broader range of conflict resolution techniques when managing conflicts during group interactions compared to males throughout various stages of their tasks (Aripin & Rahmat, 2021). This suggests that gender differences in cognitive strategies may also influence how conflicts are managed during group interactions, with female students potentially employing a broader range of conflict resolution techniques. By examining these differences in the context of group work, we aim to understand how gender impacts the dynamics of group conflicts among ESL undergraduate learners.

Problem Statement

A continuous effort of integrating collaborative learning in an ESL classroom has shown that this type of learning is embraced and benefited the learners in many ways. Skills obtained through collaborative learning especially in gender mixing groups have been highlighted in numerous studies (Arumugum, 2013; Chiriach, 2014; Rezaei, 2018; Brannen et al., 2021; Situmorang, 2021; Crisianita & Mandasari, 2022; Ha et al., 2022; Aulita & Subekti, 2024). Although there are conflicts experienced by the learners such as lack of contribution, heighten anxiety (Li et al. 2024) and decrease motivation (Tanaka, 2021) but past studies documented that learners preferred both types of learning; individual and group learning (Situmorang, 2021; Mohd Sauffi, 2022). Ideally, with the integration of more advanced technologies such as artificial intelligence used by the current generation namely Generation Z who are expected to be more holistic as they would be required to engage in more group work thus gaining the acquired skills and meet the aim of Malaysian Education Blueprint (2013-2025).

Some studies (Kutlak, 2019; Schlee et al., 2019; Dass et al., 2021) on current generations on teamwork highlighted that they preferred to be grouped and perform the task with the team members that are also their peers. This emphasizes on how they are more comfortable to be working in an environment that they are used to in order to avoid conflicts. This has come to the objective of this research to explore the diversity of gender in the process of group formation as generally men and women are seen to handle conflicts differently while completing the task (Dildar & Amjad, 2017; Feng et al., 2023). Different ways that male and female learners handle conflict will negatively impact the dynamic of group conflict which will lead to the goal of task of the group will not be achieved.

Consequently, skills that they are supposed to gain through collaborative learning are not required during the group task making them have less social engagement. Gender factor is an important variable to be explored as it determines the success of collaborative learning by addressing specifically on the learners' conflict resolution in overcoming group work conflicts. However, limited studies have been conducted to investigate the differences between males and females in their perceived experience during group work formation as past studies (Costley, 2021; Mohd Sauffi et al., 2022; Brown & Jarldorn, 2023; Sokman et al., 2023; Situmorang, 2021; Li et al., 2024; Zulkifli et al., 2025) on group work based on Tuckman's Model which only focus more on the relationship between the stages in the group formation - forming, storming, norming and performing but not on gender differences. Other past studies (Takeda & Homberg, 2014 Zhan et al., 2015; Curseu et al., 2017; Peter et al., 2021;) on the other hand investigate gender grouping and other variables (Arumugam et al, 2013; Ostafichuk et al., 2020; Crisianita & Mandasari, 2022).

Therefore, building on the existing literature, this study shifts its focus explicitly to exploring how male and female students differ in their approaches and experiences of handling conflict during the group development process. Specifically, it examines gender-based variations in communication styles, emotional responses, and conflict-resolution strategies across Tuckman's stages of forming, storming, norming, and performing. By integrating gender as a moderating variable, the research seeks to uncover whether males and females diverge in their perception of conflict intensity, utilisation of collaborative versus competitive tactics, and subsequent group outcomes. Ultimately, the aim is to provide a comprehensive, gender-informed understanding of how conflict dynamics unfold in educational group settings.

This study is done to explore perception of learners on stages of group work across gender. Specifically, this study is done to answer the following questions:

1. How do learners perceive forming stages in group work across gender?
2. How do learners perceive the storming stage in group work across gender?
3. How do learners perceive the norming stage in group work across gender?
4. How do learners perceive the performing stage in group work across gender?

LITERATURE REVIEW

Group Work

Group work in educational settings involves learning experiences in which students collaborate on the same task to achieve common goals (Johnson and Johnson, 2009). This pedagogical approach offers many benefits in education. Effective group work is widely recognized for its ability to develop more skills in learning. Crisianita and Mandasari (2022), stated that using small group discussion in improving speaking skill helped to bolster students' confidence. In addition, it offers students the opportunity to develop collaborative skills. According to Gillies (2019) collaborative learning involves students engaging with peers within their groups to actively listen, inquire, clarify, and express opinions. Furthermore, this interaction facilitates mutual learning and the development of effective teamwork strategies (Lin & Huang, 2020). As a result, these practices involve applying metacognitive skills such as planning, monitoring progress, and assessing outcomes (Durak & Uslu, 2021). Throughout these processes of group development, factors such as peer influence, task completion and preference cause the changes in the students' students' emotional and social engagement in completing their assigned tasks and leadership plays an important role in promoting effective collaboration (Li et al., 2024). Therefore, in order to ensure the success of the group work, each stage plays an important role in helping the students to cope with challenges.

Gender differences have been extensively studied in the context of group work. Research indicates that men participated more than expected in group work (Aguillon et al., 2020). Men often demonstrate assertiveness and a focus on operational aspects, whereas women tend to emphasize collaboration and nurturing relationships (Ardito et al., 2020). Research also demonstrated that male pairing has the lowest levels of expectations and cooperative rates (Cigarini et al., 2020). On the other hand, when mixed genders come together, they enable the students to learn about the opposite gender, increase positive attitudes towards learning the content, and make learning more enjoyable (Karmina et al., 2023). However, male and female students' engagement levels are higher in same-gender groups as compared to gender-mixing groups (Feng et al., 2023). In the same study, it is reported that there is a significant difference between male and female in interaction and behaviors posed during the collaborative work as females posed more relevant attitudes in completing tasks during group work while males showed less commitment in participation and communication. Peter et al. (2021) highlights that all female groups outperform males in terms of creativity and fluency, and it was found that imbalance of number of genders in gender-mixing groups have impacted creative performance negatively.

Conflicts in Group Work

As reported in Rojas-Ruis et al. (2026) one of the most conflicts in the university environment is challenges faced in group work. However, conflict in group work is natural and may be beneficial for group work (Rahmat, 2021). Tuckman's model has described five stages of team development including forming, storming, norming, performing, and adjourning where conflict is the most prevalent during the storming stage. Team conflict arises from perceived differences in interests between two or more members. Disagreement most likely to happen in the initial stage of group work that will distort their engagement (Li et al., 2024). Trust issues, lack of control and positive group dynamics are some of the factors that caused students to experience academic anxiety (Brannen et al., 2021). According to Mitchell and Bruno (2021) relational conflict can negatively impact team performance and lead to dissatisfaction among members, whereas task conflict can sometimes enhance performance by improving information sharing and collaboration. However, Li et al. (2024) highlight that team

members will support each other upon completing the group task as they start to realise each other's contribution. and In addition, properly managed conflict during storming can be a source of growth for the group and group members (Brown & Jarldorn, 2023). According to Bajjaly and Saunders (2023), soft skills are crucial for social workers to assist a group in resolving conflict cooperatively. Positive interaction between team members has a positive contribution towards the collaboration because their emotional and social engagement are increased resulting in them to resolve conflicts more efficiently (Li et al. 2024).

In terms of gender, research reveals that gender significantly influences conflict in group work. Studies found that female learners are prone to have more conflicts than their male counterparts (Ella et al., 2007); Rahmat et al., 2021). In addition, women are more sensitive to conflicts and are more inclined to focus on interpersonal issues when understanding these conflicts, in contrast, men are more likely to attribute conflicts to factors related to tasks, performance, or situational elements (Brahnam et al., 2005; Sheppard & Aquino, 2017). Furthermore, studies indicate that gender roles influence how individuals handle conflicts. For example, men are readily perceived as competitive, authoritative, direct, and task-oriented, often occupying dominant social positions. On the other hand, women are viewed as accommodating, indirect, less powerful, and more focused on interpersonal and affective aspects (Holmes, 2008). Dildar and Amjad (2017) found that women have greater 'compromising' traits as compared to men in resolving conflicts as men are more competitive despite them perceiving conflicts as a learning opportunity (Rojas-Ruis et al., 2026). Therefore, these gender-based traits lead to predictable differences in conflict handling, with men and women adopting different approaches in managing conflicts (Hou et al., 2023). Male and female students are reported to be more cooperative and engaging in the same-gender group rather than a mixed group as both showed differences in behaviours during the collaboration in a mixed-gender group (Feng et al., 2023). Females were more likely to be active and they practiced all skills in collaborating such as listening, interacting and accepting team members' opinions while men were inactive as they favoured less verbal communication.

Takahashi (2024) reported that both genders showcased similar attitudes towards being corrected by their team members either males or females. As a result, they show less interest in work in a group causing the group to be inefficient and disrupt the collaborative learning process. This may cause the students to prefer working in the same-gender group. However, Dildar and Amjad (2017) emphasise that both genders depicted similar approach in dealing with conflicts which is avoiding attitude but they also collaborate positively in a team work. Studies by Rahmat (2020) and Aulita and Subekti (2024) highlight that positive and similar attitudes are portrayed by learners regardless of gender because collaboration helps them to improve their learning. Steen and Shinka (2020) reported that there is an inconsistency in the findings of gender and group work conflicts because conflicts are dealt with based on "individual's frame of reference (identity, prior beliefs, experiences, culture, gender etc.)" (p. 51). The strategies in handling the conflicts could stem from their accumulated experiences, hierarchy and history. The study emphasised that although gender is important it is not the sole dominant factor of how people perceive and respond to conflicts. Another study also highlights that management of conflicts do not correlate with gender but more on an individual's personality as people with androgynous character tend to be more dominative as compared with people with soft or less masculine character who are avoidant (Shaikh, 2022).

Past Studies on Group Work

Group work in ESL learning is crucial as it enhances language skills by promoting communication and allowing students to practice speaking, listening, and vocabulary in a collaborative environment. It fosters social interaction, helping to build a supportive classroom community, which is essential for effective language acquisition. Additionally, Putri and Sumartini (2021) highlighted that peer learning during group activities exposes students to diverse perspectives and problem-solving approaches, enriching their learning experience. Collaborative tasks also increase student motivation and engagement, making language learning more enjoyable and effective. Furthermore, group work encourages critical thinking and negotiation skills, as students discuss and solve problems together (Tang et al., 2020). It stimulates real-world situations where language use is necessary, preparing students for authentic interactions between genders and different age groups which could help educators understand these dynamics and refine instructional strategies to improve ESL learning outcomes. However, despite the many positive outputs in utilising group work in ESL teaching and learning, there are instances where due to gender, thinking, and personality differences could lead to different outcomes in regard

to forming and conducting projects as a group. Hence, many studies have been done to investigate the effectiveness of group work.

There have been many past studies conducted especially in terms of group work in ESL learning among students especially on the speaking component. Namaziandost et al. (2019) conducted a study aimed to investigate the effectiveness of group discussion learning approaches in the Iranians English language classrooms to further enhance their speaking skills and motivations in practicing the language. It was reported that most ESL teaching approaches in Iran are traditional and heavily textbook based which resulted in the students to understand the theoretical part of learning the English language but poor when it comes to utilising the language specifically speaking. Furthermore, this has resulted in most students feeling demotivated to use the language properly when interacting with fellow peers outside of the classroom especially when it is not a dominant language. It has become a need to implement a more efficient approach in teaching the speaking component when learning English language, hence, a more collaborative approach involving ninety (90) male EFL learners studying how to teach English as a foreign language (TEFL) at Islamic Azad University participated in the study conducted by Namaziandost et al. (2019). The participants were of similar age, ranging from 20 to 22 years old and were divided into two groups and were instructed to complete 3 tasks; class presentation, structured teamwork in group communication, and team assessment in conducting group discussion of 8 students in a group. The findings indicate a tremendous improvement in the students' speaking skills after the introduction of collaborative group learning approach whereby the students felt more comfortable to do class presentations in English due to how they were given the opportunity to discuss and plan the entire presentation in English. The combination of different age ranges of students in a group resulted in more cooperative discussion among them where it was found that they are more inclined to accept each other's feedback in making the presentations better and have the opportunity to practice the presentation with each other making it easier to improve. Moreover, the students were found to have high motivation value in using the English language especially after completing the teamwork and group discussion tasks as they are able to be more familiar with each other's English speaking skills, able to react creatively, and able to speak with the assurance to receive constructive feedback on how to improve among their group members. This can be concluded that the students' motivation has improved as well despite a significant improvement in utilising their English when speaking during in-class activities. These findings imply that it is essential for educators to implement well-structured speaking activities with their students to better improve their English-speaking skills and motivation. Additionally, educators should play a vital role in promoting more collaborative or group work-based teaching approaches in ESL classrooms which enable the students to identify issues and determine appropriate strategies to improve their English learning experiences as they are more engaged in group-based activities.

Next, the study by Abu Bakar et al. (2021) also looked at group work in ESL learning but specifically on students' perception on leadership skills via group work in an ESL classroom. The study mentioned that leadership skills could be developed and enhanced through group work in an ESL classroom. By working together in groups, it will encourage students to develop and apply their leadership skills especially in managing and assigning tasks to their group members. It is essential for educators to promote and encourage effective communication in an English classroom but allow the opportunities for students to manage their group when completing in-class activities, assessments, or even tasks that involve them to improve their English skills which could lead to the improvement of their leadership skills. Hence, the study was to investigate the students' perception on leadership while working in groups in identifying the challenges faced by group leaders and the solutions taken to overcome the challenges. Forty-five (45) participants who were first year students taking English Oral Communication class in their second semester were involved in the study and five (5) group leaders were selected. The study used a qualitative approach by conducting observation and interview to answer the research questions posed by the researchers. The findings of the study have highlighted that there are multiple challenges faced by group leaders in managing group work in an English classroom that can be categorised into 4 areas - attitude, communication, co-operation, and internet connection. In terms of attitude, group leaders find that their group members were those who have multiple personalities which were passive, shy, and very opinionated that resulted in lack of communication between the leaders and their group members. Furthermore, due to lack of communication among the team, they encountered several miscommunications, late submission of the tasks given by their lecturers, and misunderstanding of the tasks assigned due to poor internet connection (when conducting online discussions). From the outcomes, the group leaders learned that to overcome these difficulties

in the future it is better to have good command in terms of two areas which are having good communication skills and portray a good attitude towards group members. Having better communication skills will result in the group leaders having the abilities to understand their group members better and be able to communicate clearly since it will be difficult for them to choose their preferred group members due to class size and students having different personalities regardless. Better communication skills can also be achieved through proper checklists created by group leaders in order to see the group members' progress with the assigned tasks to complete the tasks given by the class lecturers by following the requirements needed. Other than that, group leaders must constantly reach out to their group members to remind them of the tasks so that it could be completed on time for the group leaders to proofread everything. Apart from that, portraying a good personality is another key in becoming good group leaders. By showing more tolerance and patience towards group members as well as being positive when facing challenges in groups could lead to better time management and the ability to see proper solutions much better. This research carries implications for ESL lecturers to implement group work in the classroom to not just encourage the students to communicate effectively using the English language, but to provide an opportunity for the students to develop their leadership skills. This is also an opportunity for lecturers to promote critical thinking to students when facing several challenges to manage their group members in completing tasks to ensure that they can become better people with good team management skills in leading their group, as well as an opportunity to utilise the English language in overcoming the challenges.

CONCEPTUAL FRAMEWORK

Figure 1 shows the conceptual framework of the study. Tuckman's model (1965) of group work requires a process that has several stages (1) forming, (2) storming, (3) norming and (4) performing. In order to attain a high-performance group, team members will undergo each stage that will make them understand each other better and complete the task efficiently. In a forming stage, team members will set our rules and expectations for their team and in this initial stage, they will define their role in the group. In the second stage, storming, conflict will start to emerge as they start to have clashes of ideas, arguments and dissatisfaction towards each other. According to Rahmat (2020), conflicts in group work help to improve the team members' skill in compromising and negotiation. Team members may argue for their ideas to be accepted but eventually the action will help them to be more acceptable towards differences and the emerging conflicts help them to achieve consensus. This will lead them to the next stage, norming. In norming, the team members have resolved most of their differences and started to collaborate positively. They have understood each other and roles in the team. If conflicts arise within this stage, it can be resolved easily. The final stage which is a performing stage marks the ability of team members to complete the assigned tasks based on their roles and responsibilities. They have achieved great understanding between each other and make significant progress in achieving their goals.

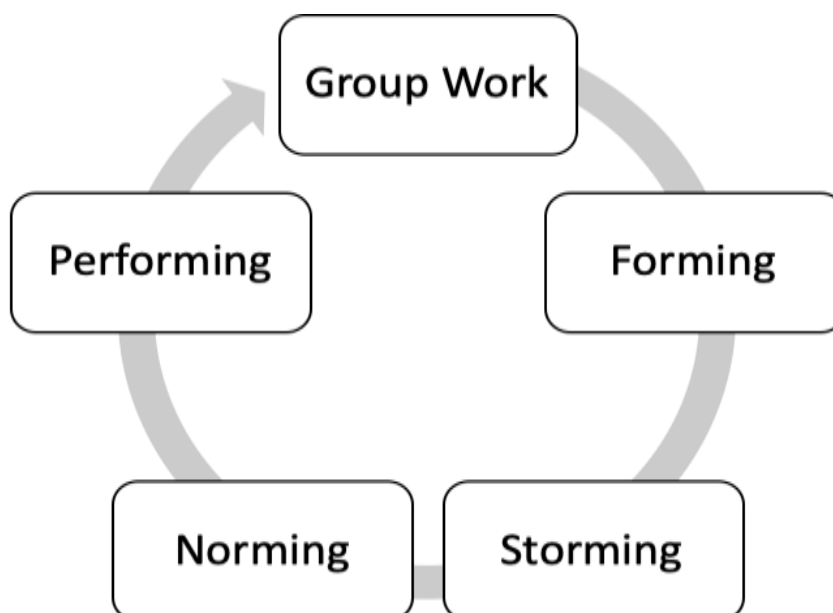


Figure 1. Conceptual Framework of the Study- Group Work

METHODOLOGY

This quantitative study is done to explore group work formation of undergraduates in ESL classrooms. A purposive sample of 176 participants responded to the survey. The instrument used is a 5 Likert-scale survey and is rooted from Tuckman's Teamwork Survey (2016) to reveal the variables in Table 1 below. The distributed questionnaire has five sections. Section A has items on demographic profiles. All items in Section B until Section E are constructed on the group work formation, which Section B: Forming (7 items), Section C: Storming (6 items), Section D: Norming (8 items) and Section E: Performing (8 items).

Table 1. Distribution of Items in the Survey

SECTION	GROUP WORK STAGES	NO OF ITEMS	CRONBACH ALPHA
B	FORMING	7	.637
C	STORMING	6	.708
D	NORMING	8	.684
E	PERFORMING	8	.857
TOTAL		29	.877

Table 1 also shows the reliability of the survey. The analysis shows a Cronbach alpha of .637, .708, .684 and .857 respectively for Section B, C, D and E. Thus, this reveals a good reliability (.877) of the instrument chosen. Further analysis using SPSS is done to present findings to answer the research questions for this study.

FINDINGS

Findings for Demographic Profile

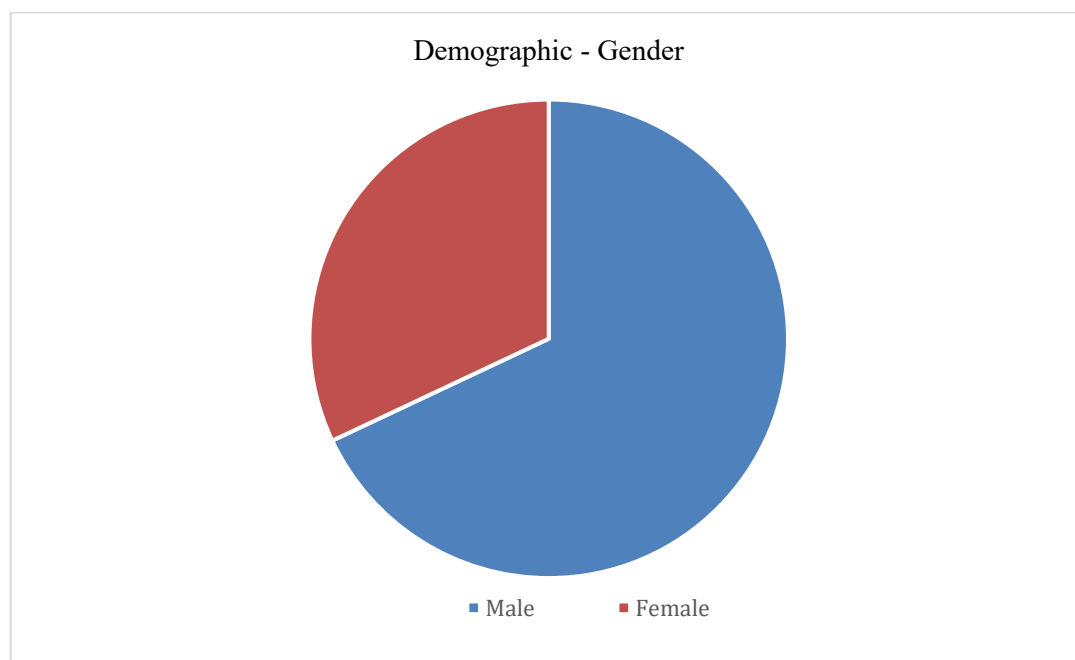


Figure 2. Percentage for Demographic Profile

Fig. 2 shows the gender and discipline distribution of the study's participants. Females comprised 32% of the participants, while males represented the majority (68%).

Findings for Forming stage across gender

This section presents data to answer research question 1: How is Forming displayed during online group work across genders?

Table 2. ANOVA Table for Forming Stage across Gender

		Sum of Squares	df	Mean Square	F	Sig.
SECTCaFQ1	Between Groups	.219	1	.219	.234	.629
	Within Groups	164.753	176	.936		
	Total	164.972	177			
SECTCaFQ2	Between Groups	.064	1	.064	.128	.721
	Within Groups	88.233	176	.501		
	Total	88.298	177			
SECTCaFQ3	Between Groups	.392	1	.392	.767	.382
	Within Groups	89.967	176	.511		
	Total	90.360	177			
SECTCaFQ4	Between Groups	.709	1	.709	.567	.452
	Within Groups	220.016	176	1.250		
	Total	220.725	177			
SECTCaFQ5	Between Groups	.622	1	.622	.430	.513
	Within Groups	254.501	176	1.446		
	Total	255.124	177			
SECTCaFQ6	Between Groups	.406	1	.406	.562	.455
	Within Groups	127.190	176	.723		
	Total	127.596	177			
SECTCaFQ7	Between Groups	.688	1	.688	.760	.385
	Within Groups	159.363	176	.905		
	Total	160.051	177			

In reference to Table 2, there are no significant difference ($p > 0.05$) reported for all items in the Forming Stage across gender.

Table 3. Mean for FORMING STAGE

ITEMS	MEAN	
	MALE	FEMALE
SECTCaFQ1 Before we begin any group activities, we set rule or procedures to ensure that everything run smoothly.	4.2	4.1
SECTCaFQ2 Before we begin any group activities, we assign specific roles to team members	4.4	4.5
SECTCaFQ3 Before we begin any group activities, we determine the goal and what tasks need to be accomplished.	4.4	4.5
SECTCaFQ4 Before we begin any group activities, our team members may be reluctant or unwilling to seek help from others.	3.0	3.1

SECTCaFQ5 Before we begin any group activities, team members do not completely trust each other and closely monitor others on a specific task.	2.7	2.8
SECTCaFQ6 At the beginning, it seems like we are making little progress to achieve the goal of the task.	4.0	3.8
SECTCaFQ7 At the beginning, even if we are not completely sure about the project's goals and issues, we are excited and proud to be on the team.	4.0	3.9

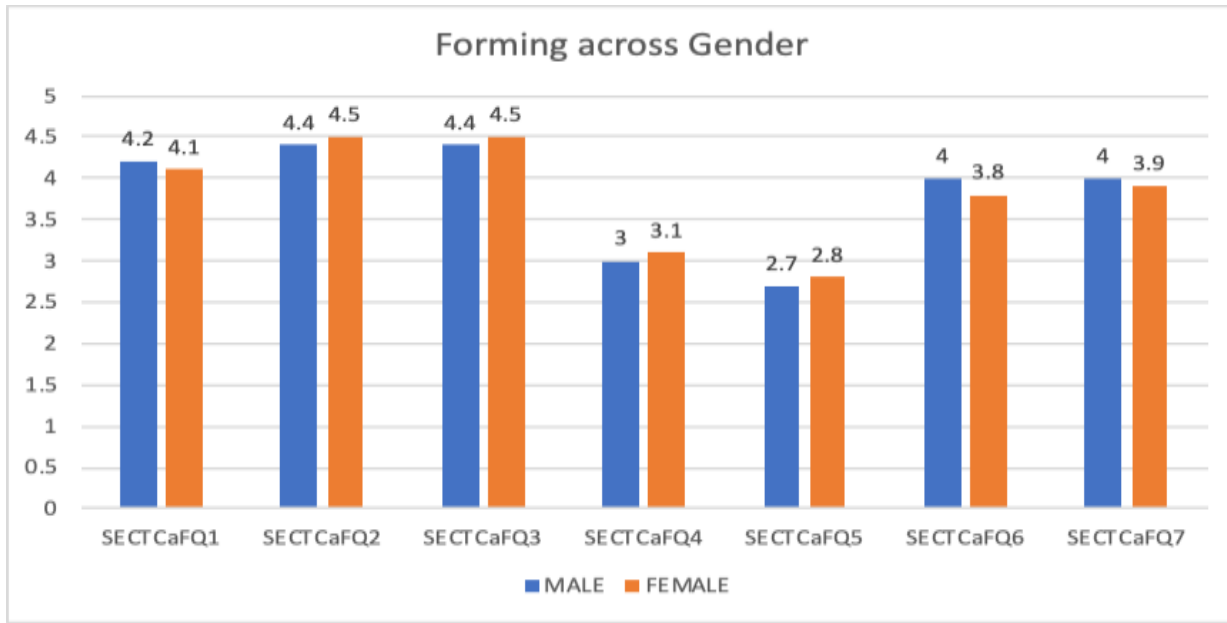


Figure 3. Mean for Forming Stage across Gender

Based on Table 3 and Figure 2 above, the mean scores for the forming stage of group work among male and female students reveals that the highest mean scores for both genders were recorded for SECTCaFQ2 (assigning specific roles) and SECTCaFQ3 (determining goals and tasks). Males scored 4.4 and females scored 4.5 for both items, indicating a strong focus on organisation and clarity of task in the initial stages of group activities. Conversely, the lowest mean scores were recorded for SECTCaFQ5 (trust issues and monitoring), with males scoring 2.7 and females scoring 2.8. This suggests that trust issues are a common challenge at the beginning of group work.

Findings for Storming stage across gender

Table 4. ANOVA Table for Storming Stage

		Sum of Squares	df	Mean Square	F	Sig.
SECTCbSQ1 *gender	Between Groups	.768	1	.768	.972	.325
	Within Groups	139.013	176	.790		
	Total	139.781	177			
SECTCbSQ2 *gender	Between Groups	.000	1	.000	.000	.994
	Within Groups	101.595	176	.577		
	Total	101.596	177			
SECTCbSQ3 *gender	Between Groups	.642	1	.642	.747	.389
	Within Groups	151.313	176	.860		
	Total	151.955	177			

SECTCbSQ4 *gender	Between Groups	10.248	1	10.248	7.796	.006
	Within Groups	231.353	176	1.315		
	Total	241.601	177			
SECTCbSQ5 *gender	Between Groups	.768	1	.768	.800	.372
	Within Groups	169.013	176	.960		
	Total	169.781	177			
SECTCbSQ6 *gender	Between Groups	.957	1	.957	1.039	.310
	Within Groups	162.166	176	.921		
	Total	163.124	177			

Table 4 shows that all items in forming show no significant difference ($p > 0.05$) across gender.

Table 5. Mean for STORMING STAGE

ITEMS	MEAN	
	MALE	FEMALE
SECTCbSQ1 During discussions, we are quick to get on with the task at hand and do not spend too much time in the planning stage.	3.7	3.6
SECTCbSQ2 During discussions, the team leader tries to keep order and contributes to the task at hand.	4.2	4.2
SECTCbSQ3 During discussions, the tasks are very different from what we imagined and seem very difficult to accomplish.	3.4	3.2
SECTCbSQ4 During discussions, we argue a lot even though we agree on the real issues.	3.9	2.7
SECTCbSQ5 During discussions, the goals we have established seem unrealistic.	2.7	2.6
SECTCbSQ6 During discussions, there is a lot of resistance to the tasks at hand and approaches to quality improvement.	3.1	3.3

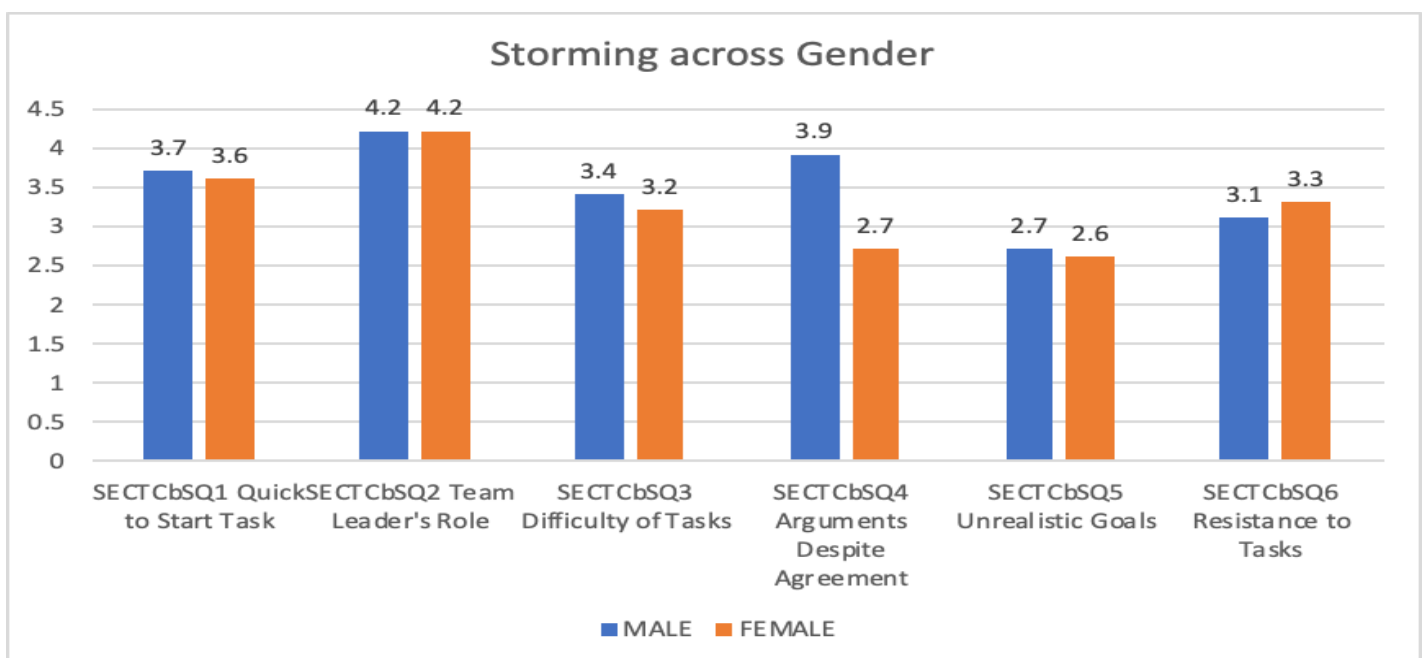


Figure 4. Mean for Storming Stage across Gender

This section presents data to answer research question 1- How do learners perceive storming stage in group work across gender?

Table 5 and Figure 4 illustrate the mean scores in storming stages across gender in group work. The analysis indicates that both male and female students share the same level of perception of ‘Before we begin any group activities, we assign specific roles to team members’ and ‘Before we begin any group activities, we determine the goal and what tasks need to be accomplished’ (M: Male = 4.4, Female = 4.5). This is followed by a mean score of 4.2 (Male) and 4.1 (Female) on how confident the students are that ‘Before we begin any group activities, we set rule or procedures to ensure that everything run smoothly’. Lastly, the data revealed one item with the lowest mean score between Male (2.7) and Female (2.8) in which the students believe that ‘Before we begin any group activities, team members do not completely trust each other and closely monitor others on a specific task’.

Findings for Norming stage across gender

This section presents data to answer research question 1- How do learner perceive norming stage in group work across gender?

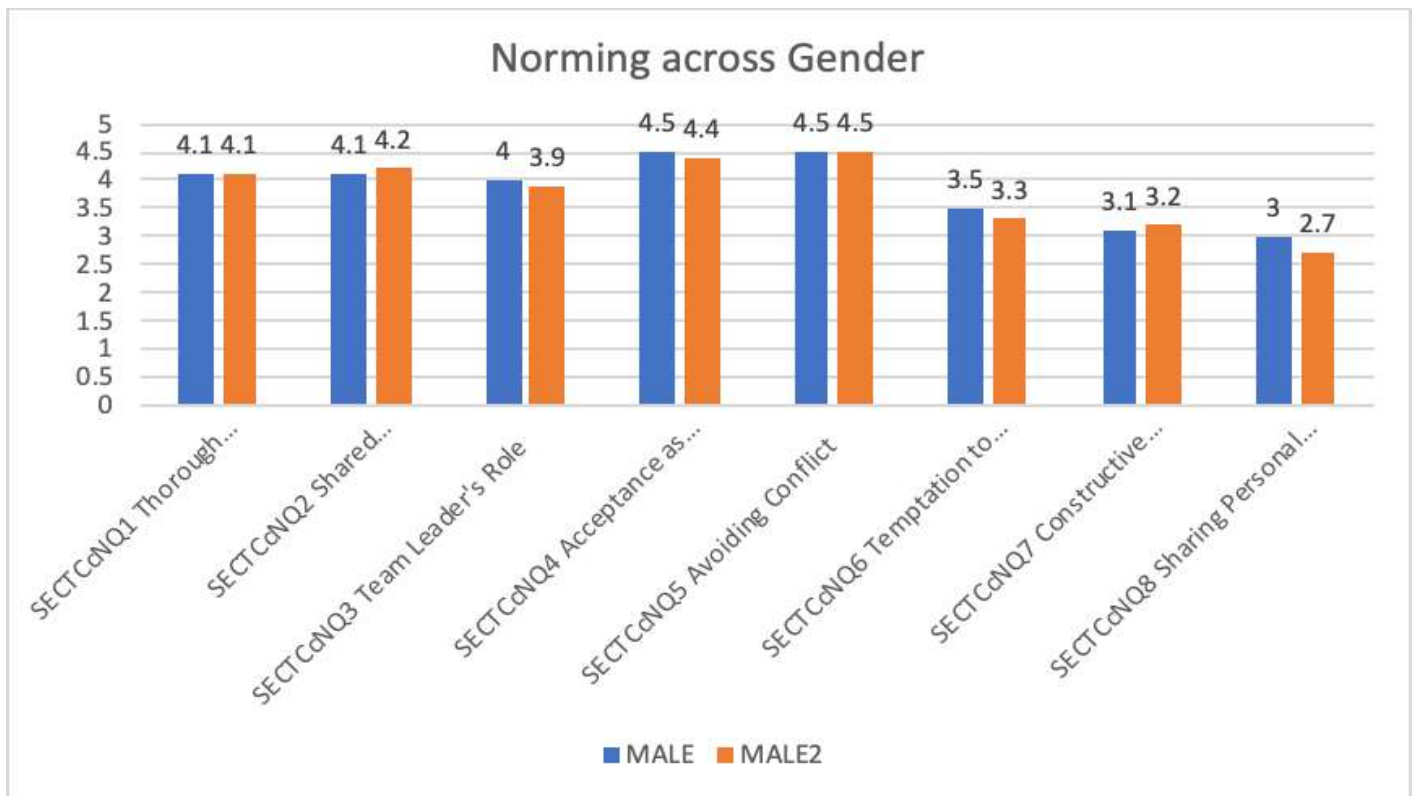
Table 6. ANOVA Table for Norming Stage

		Sum of Squares	df	Mean Square	F	Sig.
SECTCcNQ1 *gender	Between Groups	.042	1	.042	.068	.794
	Within Groups	108.480	176	.616		
	Total	108.522	177			
SECTCcNQ2 *gender	Between Groups	.001	1	.001	.002	.962
	Within Groups	88.117	176	.501		
	Total	88.118	177			
SECTCcNQ3 *gender	Between Groups	.278	1	.278	.371	.543
	Within Groups	131.632	176	.748		
	Total	131.910	177			
SECTCcNQ4 *gender	Between Groups	.339	1	.339	.617	.433
	Within Groups	96.723	176	.550		
	Total	97.062	177			
SECTCcNQ5 *gender	Between Groups	.309	1	.309	.679	.411
	Within Groups	80.140	176	.455		
	Total	80.449	177			
SECTCcNQ6 *gender	Between Groups	.611	1	.611	.668	.415
	Within Groups	160.917	176	.914		
	Total	161.528	177			
SECTCcNQ7 *gender	Between Groups	1.007	1	1.007	.801	.372
	Within Groups	221.240	176	1.257		
	Total	222.247	177			
SECTCcNQ8 *gender	Between Groups	5.181	1	5.181	3.445	.065
	Within Groups	264.707	176	1.504		
	Total	269.888	177			

Table 6 shows that all items in storming show no significant difference ($p > 0.05$) across gender.

Table 7. Mean for NORMING STAGE

ITEMS	MEAN	
	MALE	FEMALE
SECTCcNQ1 In the group, we have thorough procedures for agreeing on our objectives and planning the way we will perform our tasks.	4.1	4.1
SECTCcNQ2 In the group, we take our team's goals and objectives literally and assume a shared understanding.	4.1	4.2
SECTCcNQ3 In the group, the team leader ensures that we follow the procedures, do not argue, do not interrupt, and keep to the point.	4.0	3.9
SECTCcNQ4 In the group, we have accepted each other as members of the team.	4.5	4.4
SECTCcNQ5 In the group, we try to achieve harmony by avoiding conflict.	4.5	4.5
SECTCcNQ6 In the group, the team is often tempted to do more than what was required for the project.	3.5	3.3
SECTCcNQ7 In the group, we express criticism of others constructively	3.1	3.2
SECTCcNQ8 In the group, we often share personal problems with each other.	3.0	2.7


Figure 5. Mean for Norming Stage across Gender

The analysis of the mean scores in Table 7 and Figure 5 for the norming stage reveals that the highest mean scores for both genders were recorded for SECTCcNQ4 (acceptance as team members) and SECTCcNQ5 (avoiding conflict), with males scoring 4.5 and females 4.4 for SECTCcNQ4, and both genders scoring 4.5 for SECTCcNQ5. This indicates a strong mutual effort to avoid conflict and a high level of acceptance among team members. Conversely, the lowest mean scores were recorded for SECTCcNQ8 (sharing personal problems), with males scoring 3.0 and females 2.7, suggesting that sharing personal problems is less common among both genders. This data highlights the differences and similarities in how males and females perceive and navigate the norming stage of group work.

Findings for Performing stage across gender

This section presents data to answer research question 1- How do learners perceive performing stage in group work across gender?

Table 8: ANOVA Table for Performing Stage

		Sum of Squares	df	Mean Square	F	Sig.
SECTCdPQ1 *gender	Between Groups	.360	1	.360	.645	.423
	Within Groups	98.320	176	.559		
	Total	98.680	177			
SECTCdPQ2 *gender	Between Groups	.494	1	.494	.447	.505
	Within Groups	194.567	176	1.105		
	Total	195.062	177			
SECTCdPQ3 *gender	Between Groups	1.275	1	1.275	1.902	.170
	Within Groups	117.944	176	.670		
	Total	119.219	177			
SECTCdPQ4 *gender	Between Groups	.395	1	.395	.639	.425
	Within Groups	108.729	176	.618		
	Total	109.124	177			
SECTCdPQ5 *gender	Between Groups	1.119	1	1.119	1.943	.165
	Within Groups	101.353	176	.576		
	Total	102.472	177			
SECTCdPQ6 *gender	Between Groups	.167	1	.167	.295	.588
	Within Groups	99.614	176	.566		
	Total	99.781	177			
SECTCdPQ7 *gender	Between Groups	2.965	1	2.965	3.601	.059
	Within Groups	144.945	176	.824		
	Total	147.910	177			
SECTCdPQ8 *gender	Between Groups	.001	1	.001	.004	.949
	Within Groups	56.021	176	.318		
	Total	56.022	177			

Table 8 shows that all items in norming show no significant difference ($p > 0.05$) across gender.

Table 10. Mean for Performing Stage

ITEMS	MEAN	
	MALE	FEMALE
SECTCdPQ1 In the end, our team feels that we are all in it together and share responsibilities for the team's success or failure.	4.33	4.43
SECTCdPQ2 In the end, we do not have fixed procedures, we make them up as the task or project progresses.	3.67	3.55
SECTCdPQ3 In the end, we enjoy working together; we have a fun and productive time.	4.42	4.24
SECTCdPQ4 In the end, the team leader is democratic and collaborative.	4.32	4.21
SECTCdPQ5 In the end, we fully accept each other's strengths and weaknesses.	4.51	4.34
SECTCdPQ6 In the end, we are able to work through group problems.	4.42	4.36

SECTCdPQ7 In the end, there is a close attachment to the team.	4.21	3.93
SECTCdPQ8 In the end, we get a lot of work done.	4.61	4.62

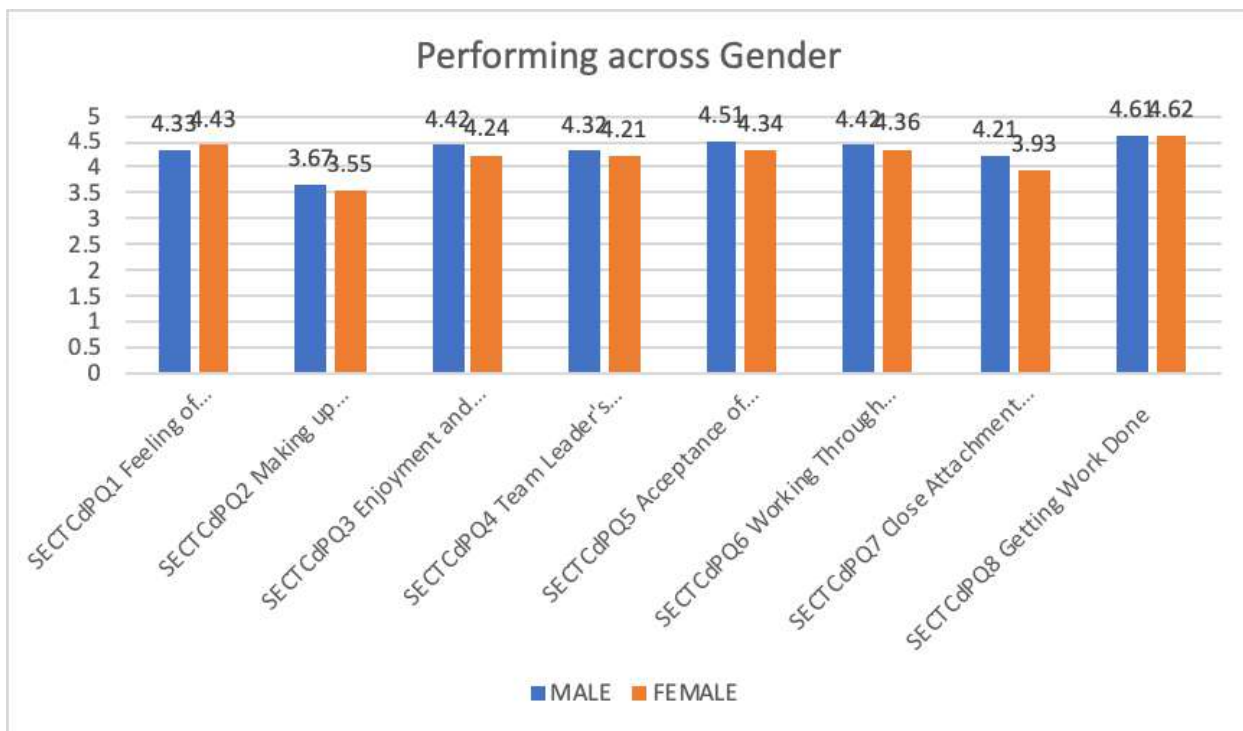


Figure 6. Mean for Performing Stage across Gender

The analysis of the mean scores for the performing and adjourning stages reveals that the highest mean scores for both genders were recorded for SECTCdPQ8 (getting work done), with females scoring 4.62 and males 4.61, indicating a strong perception of productivity. The lowest mean scores were observed for SECTCdPQ2 (making up procedures as we go), with females scoring slightly lower (3.55 vs. 3.67), suggesting that fixed procedures are less common as the project progresses. Significant differences were found in several areas: females reported a stronger sense of shared responsibility and togetherness by the end of the project (SECTCdPQ1), while males indicated higher enjoyment and productivity (SECTCdPQ3) and a greater acceptance of each other's strengths and weaknesses (SECTCdPQ5). Additionally, males perceived the team leader as more democratic and collaborative (SECTCdPQ4) and felt a closer attachment to the team (SECTCdPQ7). Both genders showed a strong ability to work through group problems, with males scoring slightly higher (SECTCdPQ6). These findings highlight the differences and similarities in how male and female students experience the performing and adjourning stages of group work, emphasizing the importance of recognizing and addressing these differences to enhance group dynamics and productivity.

CONCLUSION

Summary of Findings and Discussions

Group work requires stages namely forming, storming, norming and performing. In these stages of group work, students face challenges in the initial stages and resolve it in the process. Collaboration helps learners to gain skills and provides them with a better learning experience. Conflicts are visible and will impair the group dynamic, but both genders show similar attitudes in dealing with the conflicts. This study is done to explore perception of learners on their use of learning strategies. Specifically, this study is done to answer the following questions:

1. How do learners perceive forming stages in group work across gender?
2. How do learners perceive the storming stage in group work across gender?

3. How do learners perceive the norming stage in group work across gender?
4. How do learners perceive the performing stage in group work across gender?

This study explored gendered perceptions of group work stages—forming, storming, norming, and performing—among ESL undergraduate learners, using Tuckman's model of group development as a conceptual framework. Male and female students showed comparable levels of agreement during the formation phase on the assignment of designated roles and the initial definition of group goals. This is consistent with research by Durak and Uslu (2021) and Forsell et al. (2020), who highlighted the significance of role identification and clear structure in productive group collaboration. However, trust was found to be a persistent issue for both sexes, with lower mean scores suggesting early reluctance in social interactions. This is in line with Brannen et al. (2021), who noted that if not addressed right away, early group interactions frequently feature uncertainty and a lack of trust, which might impede group cohesion.

During the storming stage, typically characterized by conflict and resistance, both genders reported similar experiences, with high scores for leader involvement in maintaining order and low scores for unrealistic goal setting. A significant gender difference was found in perceptions of argumentative behavior (SECTCbSQ4), with males indicating a higher tendency to engage in conflict despite agreement on core issues. This observation is in line with several studies (Brahnam et al., 2005; Dildar & Amjad, 2017; Sheppard & Aquino, 2017) that highlighted males are often more direct and competitive in conflict expression, while females tend to prioritize interpersonal harmony. Despite this, the overall data did not indicate gender-based impediments to task progress, by indicating that conflict, when it did occur, was generally controllable and did not negatively affect group outcomes as Rahmat (2021) also mentioned that well-managed conflict can strengthen group processes. This finding indicates that initial group interactions were commonly identified by limited interpersonal trust and caution. Despite these challenges, both male and female respondents showed positive attitudes and readiness to participate in group activities.

During the norming stage, which involves the establishment of group norms and relationships, both male and female respondents expressed high levels of group acceptance and a planned effort to prevent conflict. The findings of Feng et al. (2023), who noted that women in particular frequently exhibit group-harmonizing behaviors that require inclusive communication and active listening, are in line with the shared focus on team cohesion. The finding of this study also found that neither gender was particularly inclined to discuss private matters with the group as women scored marginally lower than men. This could reflect the limits that students set in academic group settings, which would confirm Holmes' (2008) observation that women, although relationally oriented, may exhibit more reserved interpersonal behaviors in formal or mixed-gender situations. This may reflect a preference for maintaining professionalism or emotional boundaries within mixed or same-gender group settings.

Both genders reported strong perceptions of productivity, with high mean scores for completing tasks and shared responsibility in the final performing stage. At this point, the group's members are supposed to work together constructively to accomplish the group's objective. These findings are aligned with Gillies (2019) and Lin and Huang (2020) that underlined the strong connections between defined roles, constructive interdependence, and the development of collaborative skills and successful group performance. While female students reported a slightly stronger sense of shared responsibility, male students expressed higher enjoyment and group attachment, supporting earlier claims in Ardito et al. (2020) and Takahashi (2024) that males, when positively engaged, exhibit a great degree of teamwork and dedication. Overall, both genders perceived group tasks as enjoyable and successful, which may be attributed to collaborative environments that allow learners to exercise both cognitive and affective engagement.

ANOVA statistical analysis showed that there was no significant gender-based differences in the majority of the items across the four stages, suggesting that male and female students' perceptions of group dynamics were mostly similar. However, isolated variations in the storming and performance stages indicate slight changes in the ways that each gender handles emotional involvement and group conflict. In contrast to women, who placed more emphasis on shared responsibility and goal clarity, men demonstrated greater conflict tolerance or expression as well as a stronger sense of commitment and enjoyment. These results support the perception that

whereas gender differences do not fundamentally impair group task execution or overall collaboration, there may be some gender-specific differences in the emotional and interactional aspects of group work.

Pedagogical Implications and Suggestions for Future Research

This study emphasizes the necessity of knowing how gender affects learners' participation in group-based learning settings. The essentially comparable replies indicate that ESL students, regardless of gender, prefer organized organization, team participation, and clear objectives in group projects. However, instructors should be aware of the various ways in which male and female pupils express or experience interpersonal dynamics, particularly during dispute resolution and emotional exchanges. The increased conflict perception among male students during the storming stage, along with their higher emotional connection in the performance stage, may indicate the need for more significant conflict resolution procedures and inclusive group facilitation techniques.

To improve collaborative learning, teachers should scaffold group work with activities that foster trust early in the forming stage and increase emotional intelligence in dispute resolution throughout the storming stage. Furthermore, distributing leadership responsibilities evenly and encouraging open, organized communication may help both male and female students feel appreciated and involved. Future study might look at personality traits, cultural background, and communication styles as additional elements impacting group dynamics across genders, extending our understanding of collaborative learning in various ESL environments.

REFERENCES

1. Abu Bakar, A. L., Ationg, R., Mohd Shah, M. K., Zulhaimi, N. A., Othman, I. W., Esa, M. S., & Mokhtar, S. (2021). Students' perception on leadership skills via group work in an ESL classroom in higher learning institutions. *Journal of Islamic, Social, Economics and Development (JISED)*, 6(38), 158–166.
2. Arumugam, N., Rafik-Galea, S., de Mello, G., & Dass, L. C. (2013). Cultural influences on group learning in an ESL classroom. *Review of European Studies*, 5(2), 81–89.
3. Aguillon, S. M., Siegmund, G. F., Petipas, R. H., Drake, A. G., Cotner, S., & Ballen, C. J. (2020). Gender differences in student participation in an active-learning classroom. *CBE—Life Sciences Education*, 19(2).
4. Ardito, G., Czerkawski, B., & Scollins, L. (2020). Learning computational thinking together: Effects of gender differences in collaborative middle school robotics program. *TechTrends*, 64(3), 373–387.
5. Aulita, J., & Subekti, A. S. (2024). Indonesian L2 learners' attitudes towards group work: A survey on gender differences. *Journal on Language and Language Learning*, 27(1), 374–388.
6. Bajjaly, S., & Saunders, L. (2023). Teaching soft skills competencies in US social work programs. *Journal of Teaching in Social Work*, 43(2), 193–210.
7. Brannen, S. F., Beauchamp, D., Cartwright, N. M., Liddle, D. M., Tishinsky, J. M., Newton, G., & Monk, J. M. (2021). Effectiveness of group work contracts to facilitate collaborative group learning and reduce anxiety in traditional face-to-face lecture and online distance education course formats. *International Journal for the Scholarship of Teaching and Learning*, 15(2).
8. Brown, M., & Jarldorn, M. (2023). Overcoming fear of conflict in group work: Reflections from practice and teaching. *Social Work With Groups*, 47(1), 79–94.
9. Brahnham, S. D., Margavio, T. M., Hignite, M. A., Barrier, T. B., & Chin, J. M. (2005). A gender-based categorization for conflict resolution. *Journal of Management Development*, 24(3), 197–208.
10. Cigarini, A., Vicens, J., & Perelló, J. (2020). Gender-based pairings influence cooperative expectations and behaviours. *Scientific Reports*, 10, 1–10.
11. Chiriac, E. H. (2014). Group work as an incentive for learning: Students' experiences of group work. *Frontiers in Psychology*, 5(558), 1–10.
12. Curseu, P., Chappin, M. M. H., & Jansen, R. J. G. (2018). Gender diversity and motivation in collaborative learning groups: The mediating role of group discussion quality. *Social Psychology of Education*, 21(2), 289–302.
13. Dass, S., Ramananda, H. S., Jagadeesha, B., Rajesh Kumar, P. C., & Cherian, K. C. (2021). Effectiveness of collaborative learning among Gen Z engineering students. *Journal of Engineering Education Transformations*, 70–78.

14. Durak, H. Y., & Uslu, N. A. (2021). Turkish adaptation of the group metacognitive scale: Metacognition in online collaborative group activity. *Research on Education and Psychology*, 5(2), 288–301.
15. Ella, M. M., Roberta, S., Andrea, S., & Manuela, T. (2007). Gender differences in online collaborative learning groups promoting affective education and social capital. *Psicologia Escolar e Educacional*, 11, 27–36.
16. Forsell, J., Forslund Frykedal, K., & Hammar Chiriac, E. (2020). Group work assessment: Assessing social skills at group level. *Small Group Research*, 51(1), 87–124.
17. Gillies, R. M. (2019). Promoting academically productive student dialogue during collaborative learning. *International Journal of Educational Research*, 97, 200–209.
18. Ha, T. Y. N., Nguyen, T. B. N., Nguyen, N. L. D., & Tran, T. N. (2022). The effects of collaborative learning on young ESL learners' L2 anxiety and speaking performance. *International Journal of Aisam Education*, 3(2), 125–137.
19. Holmes, J. (2008). *Gendered Talk at Work: Constructing Gender Identity Through Workplace Discourse*. John Wiley & Sons.
20. Johnson, D. W., & Johnson, F. (2009). *Joining Together: Group Theory and Group Skills* (10th ed.). Pearson.
21. Karmina, S., Philpot, R., & Dyson, B. (2023). Exploring students' perspectives working in single and mixed-gender groups in cooperative learning: A case study from Indonesia. In *The Routledge International Handbook of Gender Beliefs, Stereotype Threat, and Teacher Expectations* (pp. 328–339). Routledge.
22. Kutlak, J. (2019). Generations Y and Z in the workplace: Perception of teamwork. *ACC Journal*, 25(2).
23. Li, J., Chen, M., & Zheng, Q. (2024). The dynamics and mediating factors of students' emotional and social engagement in a project-based writing course. *System*, 121.
24. Lin, C. Y., & Huang, C. K. (2020). Understanding the antecedents of knowledge sharing behaviour and its relationship to team effectiveness and individual learning. *Australasian Journal of Educational Technology*, 36(2), 89–104.
25. Mitchell, J. N., & Bruno, D. (2021). *Organizational Behaviour: For a Better Tomorrow*.
26. Mohd Sauffi, K., Ravinthar, T., & Abdul Razak, N. (2022). A study on students' perspective towards cooperative learning in the ESL classroom. *International Journal of Advanced Research in Education and Society*, 4(1), 165–173.
27. Othman, E. S., Husni, H., Bakar, S. F. M. A., Aris, M. N. M., Shaharudin, R. H., & Rahmat, N. H. (2023). Exploring the relationship of components in group dynamics: A case study. *International Journal of Academic Research in Business and Social Sciences*, 13(9), 1026–1040.
28. Ostafichuk, P. M., Malakoutian, M., & Khalili, M. (2020). Examining gender and nationality bias in decision-making by engineering student teams. *Proceedings of the Canadian Engineering Education Association (CEEA)*.
29. Rahmat, N. H., Aripin, N., Razlan, Z., Arepin, M., Mohandas, E. S., & Sim, M. S. (2021). Analysing the cadence of group conflicts across gender during online learning. *European Journal of Open Education and E-learning Studies*, 6(2).
30. Rojas-Ruiz, G., Alemany-Arrebola, I., & Mingorance-Estrada, Á. C. (2026). Perceptions and types of conflicts among Spanish university students: Influence of gender and religion. *International Journal of Conflict Management*, 1–20.
31. Rezaei, A. R. (2018). Effective groupwork strategies: Faculty and students' perspectives. *Journal of Education and Learning*, 7(5), 1–10.
32. Namaziandost, E., Shatalebi, V., & Nasri, M. (2019). The impact of cooperative learning on developing speaking ability and motivation toward learning English. *Journal of Language and Education*, 5(3), 83–101.
33. Peter, L., Michinov, N., Besançon, M., Michinov, E., Juhel, J., Brown, G., Jamet, E., Cherbonnier, A., & ProFAN Consortium. (2021). Revisiting the effects of gender diversity in small groups on divergent thinking: A large-scale study using synchronous electronic brainstorming. *Frontiers in Psychology*, 12, 723235.
34. Putri, S. T., & Sumartini, S. (2021). Integrating peer learning activities and problem-based learning in clinical nursing education. *SAGE Open Nursing*, 7.

35. Schlee, R. P., Eveland, V. B., & Harich, K. R. (2019). From Millennials to Gen Z: Changes in student attitudes about group projects. *Journal of Education for Business*, 95(3), 139–147.
36. Sedgewick, F., Hill, V., & Pellicano, E. (2019). “It's different for girls”: Gender differences in the friendships and conflict of autistic and neurotypical adolescents. *Autism*, 23(5), 1119–1132.
37. Situmorang, M. A. (2021). Students' perception of using group work in English class. *Journal of English Teaching*, 7(1), 81–88.
38. Takeda, S., & Homberg, F. (2013). The effects of gender on group work process and achievement: An analysis through self and peer assessment. *British Educational Research Journal*, 40(2), 373–396.
39. Tanaka, M. (2022). Individual perceptions of group work environment, motivation, and achievement. *International Review of Applied Linguistics in Language Teaching*, 60(4), 1201–1225.
40. Tang, T., Vezzani, V., & Eriksson, V. (2020). Developing critical thinking, collective creativity skills and problem-solving through playful design jams. *Thinking Skills and Creativity*, 37.
41. Sokman, Y., Othman, A. K., Aziz, A. A., Musa, M. H., Azizan, N., & Rahmat, N. H. (2023). Stages in group work: Is there a relationship among them? *International Journal of Academic Research in Business and Social Sciences*, 13(11), 7951–7971.
42. Zulkifli, N., Liyana, N., Roselan, S. S., Aminuddin, A., Rosli, H., & Rahmat, N. H. (2025). A study of the relationship between all stages of group work in Tuckman's Model. *International Journal of Academic Research in Business and Social Sciences*, 15(4), 262–277.