

Exploring Group Interactions in Group Work

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Abstract

Group work is frequently practised in academic classes as it offers students opportunities to discuss ideas. Typically, group work involves such activities as brainstorming, planning, and exchanging opinions. Since more learning sessions have gone virtual these days, group work has also shifted to online platforms. Therefore, Tuckman's model of small group development is considered relevant to the issue under discussion. The present study was conducted based on the main objective of examining to what extent the stages of small group development have effects on group interaction. Designed as quantitative research, this study utilized a questionnaire developed based on Tuckman's model which consisted of five sections. The questionnaire was distributed to 105 respondents who were enrolled in English language classes at a public university in Malaysia. In general, the results indicated that students had positive interactions throughout the four stages of group work. Through this study, it is evident that Tuckman's model is feasible to investigate how students interact with their group members from the initial to the final stage. It also proves that positive interaction between students is crucial in achieving a positive result in group work.

Keywords: Group Work, Group Interaction, Tuckman's Model Of Small Group Development

1.0 INTRODUCTION

1.1 Background of Study

Group work is frequently practised in English language classes as it offers students opportunities to discuss ideas which can contribute to the development of their English language proficiency. At the same time, group learning can instil positive personal values among students such as unity, tolerance, obedience, and respectfulness (Arumugam et al., 2013). In the previous years, group work was conducted face-to-face in class, but this has changed tremendously especially after the pandemic. As more learning sessions have been conducted virtually, group work has also shifted online through numerous platforms. Nonetheless, online group work can present challenges to students due to its asynchronous mode and lack of physical presence (Chang & Kang, 2016). Students also reported facing other

problems related to personal attention, physical and mental health, relationship, and technical issues (Jafar et al., 2023).

In Malaysian educational settings, students are encouraged to participate in online activities, hence, working in groups in online platforms have been very common. One of the initiatives to encourage online learning is evident in the Malaysian government's assistance for students from low socio-economic families by providing them with gadgets in order to overcome the gap in digital education with other students of higher socio-economic statuses (Jafar et al., 2023). Through this initiative, digital illiteracy is not a major problem among Malaysian students (Jafar et al., 2023) and students from low socio-economic families are supportive of online learning as they believe it will help them to progress positively in academics and future careers (Azhar et al., 2021).

Motivated by students' positive acceptance of online learning, this study intended to examine students' interactions within their groups while carrying out group work because these days group discussions are done both physically and virtually. The study utilized Tuckman's model of developmental sequence in small groups. In general, the model is considered relevant to the present study as it describes the ways how students work collaboratively, helps group members to understand the development process, and predicts the stages of growth in group work (Bonebright, 2010).

1.2 Statement of Problem

In line with the rapid growth of fourth industrial revolution especially in education sector, students are required to be active learners in their own learning process. Hence, higher level of education should not just prepare them for academic success but there is also a need for development of desired skills like communication and interaction with the society. Parallel to this, collaborative learning or group work plays a pivotal role in developing students' interaction skills (Ghavifekr, 2020). In her study, with 100 secondary school students, it is evident that students believe collaborative learning has helped them to work best with others and improve their socialization process with others. This is also supported in another study by Johnson et al. (2007) where the research demonstrated that student collaboration in small groups (two to five students) can boost academic and social educational outputs.

However, the implementation of collaborative learning is not always adequate in classroom practice. In Le et al.'s study (2018), it is discovered that there are four frequently occurring obstacles in collaborative learning or group work. The first obstacle discovered is students' lack of group work skills and this is followed by free riding of the group members, competence status and the final obstacle is friendship status. To delve further into lack of group work skills, the respondents assert that they are having problem accepting opposing viewpoints, giving elaborations, providing, and receiving help and negotiating in a group work activity. All of these will eventually impede group interactions. One of the identified causes for students' lack collaborative skills is they do not receive much training in social interactions which will affect their productive collaboration (Galton et al., 2009).

In short, there are numerous literature claiming that collaborative learning or group work is normally associated with positive results for students. Nonetheless, it is also irrefutable that there are various challenges to effective group work to take place. With the significance of students' communication and interaction skills in learning, it is essential for us to evaluate how the multiple elements of group work learning such as communication, trust, and shared responsibility, might interact with each other and how they are related to team and individual outcomes (Griffiths et al, 2021). Qureshi et al. (2021) also suggested for the inclusion of other

social factors like social presence of instructors, dimension of student engagement or learning outcomes to study the effectiveness of active collaborative learning in students' learning performance.

1.3 Research Objectives

- To examine the influence of the forming stage on group interaction
- To examine the influence of the storming stage on group interaction
- To examine the influence of the norming stage on group interaction
- To examine the influence of the performing stage on group interaction

1.4 Research Questions

- How does the forming stage influence group interaction?
- How does the storming stage influence group interaction?
- How does the norming stage influence group interaction?
- How does the performing stage influence group interaction?

2.0 LITERATURE REVIEW

2.1 Interaction in Online Group Work

Typical features of academic group work encompass brainstorming, planning, and exchanging opinions in which group members must be actively involved in sharing ideas, expressing opinions, and challenging peer members' ideas in a positive manner (Toomaneejinda & Harding, 2018). Whether group members are willing or unwilling to communicate their ideas and opinions in group discussions can also be influenced considerably by internal and external factors. Internal factors are individual, linguistic, perceived, and organizational factors, while external factors are environment, task dynamics, facilitators, co-participants, and topics (Nematizadeh & Cao, 2023). If these factors are not managed properly, group work can be susceptible to disagreements among group members. Moreover, if they are not handled effectively through support and cooperation by everyone involved, this can escalate to a very serious dispute among all.

2.2 Past Studies on Group Work

Research studies overwhelmingly have shown that collaborative learning is an effective form of learning (Johnson et al., 1984). Despite all the studies reporting the usefulness of group work learning in education, the paradigm remains unfavourable to some parties especially for its issue of students rarely receive full training to cooperate in academic setting and students may also raise the issue of instructors not doing their work (Panitz et al., 1998). Collaborative learning or group work is seen as a student-centred learning, making some students question the role of instructors in class. In another study conducted by Darko et al. (2021), the findings from 245 students indicate that they show a favourable attitude toward collaborative learning as they could experience a learner-centred environment, improve their academic skills, develop strong working relationships and increase class participation. Nevertheless, the research participants also admitted that they faced challenges in terms of interacting and coordinating with group members, lack of leadership, lack of motivation, lack of time, procrastination, scheduling conflicts and unequal participation while working in a group. Thus, it is suggested for the academic board of the university to re-evaluate the offered academic course to make collaborative learning a major pedagogy.

2.3 Conceptual Framework

Figure 1 shows the conceptual framework of the study. This study is replicated from Tuckman (1975). Tuckman's model consists of four stages: forming, storming, norming and performing. The forming stage is an initial stage in which group members meet and set agreements related to their group work. This stage also involves group members to develop an orientation to the assigned task, creates rules for the group, test boundaries and create organizational standards. In the next stage, storming, group members begin to work as a team and learn about each other's styles, voice, and discuss their opinions. In this stage also group members may experience conflicts and need to work to overcome their conflicts. Once the conflicts are resolved, the group enters the norming stage in which they develop co-operation and tolerance in order to achieve their goals. In the final stage, performing, group members play their roles to support and enhance task performance and finally progress towards the stated goals (Aquino et al., 2022). Once the task is complete and goal is accomplished, the group moves on to "adjourning" as all group members separate themselves from the group. This model can be fully adapted to online group work because the stages involved in the process are applicable to online learning.



Figure 1- Conceptual Framework of the Study
Interactions in Group Work

3.0 METHODOLOGY

This quantitative study was carried out to examine to what extent the stages of small group development have effects on group interaction. A convenience sampling was conducted to obtain information from 105 survey respondents. The respondents were undergraduate students studying at in public university in Malaysia in different semesters and were enrolled in English language courses. The instrument used in the survey was a 5 Likert-scale survey rooted from Tuckman (1975). The survey was divided into 5 sections: Section A consisted of items on students' demographic profile whereas Sections B, C, D, and E consisted of items related to the four stages of Tuckman's model: forming, storming, norming and performing. Table 1 shows the number of items distributed in each section of the questionnaire.

Table 1- Distribution of Items in the Survey

SECTION	STAGE	Items
B	FORMING	7
C	STORMING	6
D	NORMING	8
E	PERFORMING	8
		29

Table 2- Reliability of Survey

Reliability Statistics	
Cronbach's Alpha	N of Items
.793	29

Table 2 shows the reliability of the survey. The analysis shows a Cronbach alpha of .793, thus, revealing a good reliability of the instrument used. Further analysis using SPSS is done to present findings to answer the research questions for this study.

4.0 FINDINGS

4.1 Findings for Demographic Profile

Q1. Gender

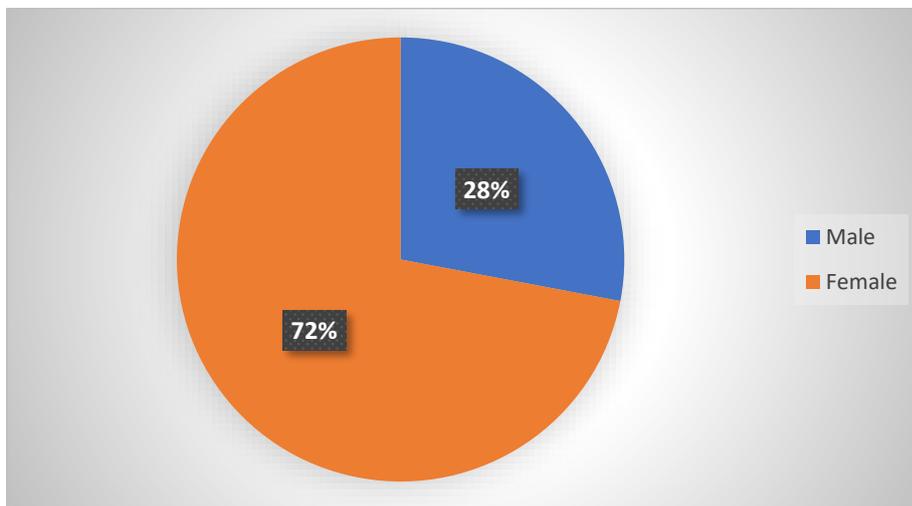


Figure 2 -Percentage for Gender

The demographic profile of the students who participated in this study are discussed in this section. Gender distribution of the students is shown in Figure 2 and from the table, we could see that 28% of the respondents were male students whereas 72% were female students. This shows that there were more female students than male students who took part in answering the questionnaire for this research.

Q2.Level

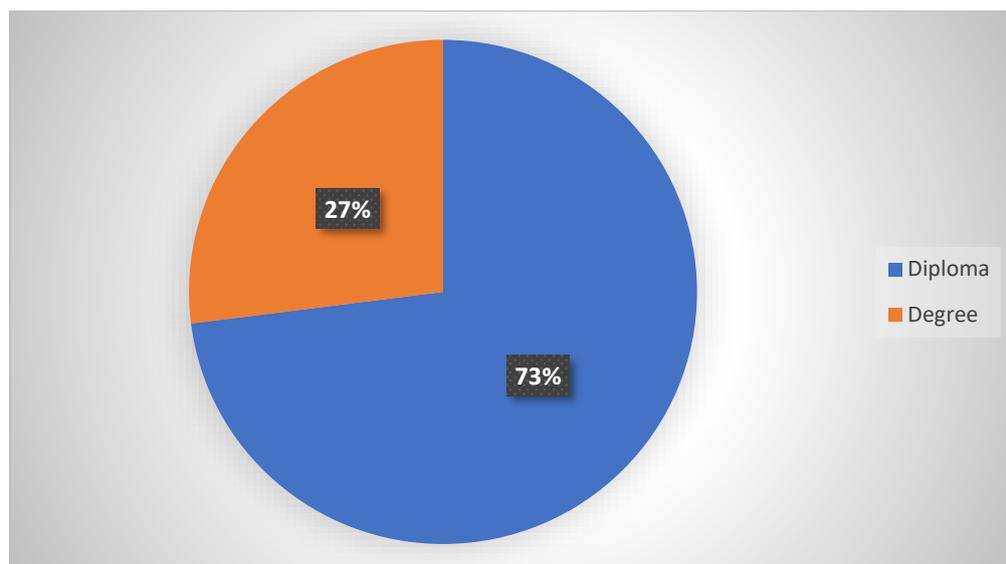


Figure 3 -Percentage for Highest Academic Level

Figure 3 listed the academic levels of the respondents in this study. As illustrated above, 73% of the respondents were pursuing their diploma level while 27% of the them were doing degree studies. This means the respondents of this study were dominated by diploma students.

4.2 Findings for Forming

This section presents data to answer research question 1- How does the forming stage influence group interaction?

FORMING STAGE

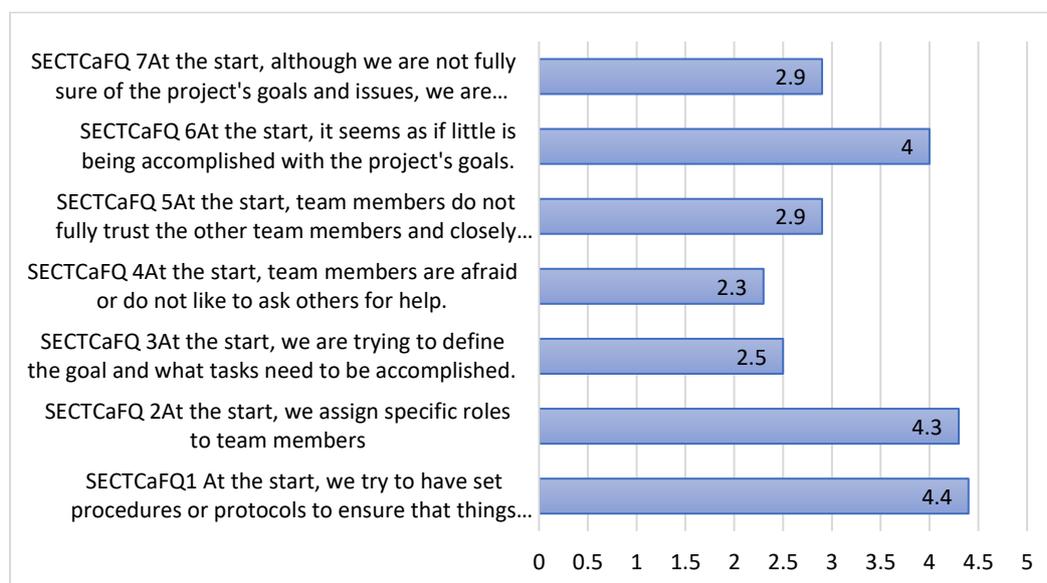


Figure 4-- Mean for Forming Stage

The forming stage is the first stage in Tuckman’s model. Based on the mean value shown in Figure 4, the highest mean is generated for item FQ1 (M = 4.4). It means that when working in groups, the students would normally establish the groups’ procedures to keep their groups’ structures in order before they proceed to carrying out their tasks. Nevertheless, the mean

for item FQ3 is much lower ($M = 2.5$) than item 1. This may imply that although they felt it is important to set the procedures and structures for their group work, they did not see the need to describe the goals and tasks. This is possible because lecturers may have clearly informed them of the tasks assigned to each group and the output they will produce from the assignments. The lowest mean value for this stage is for item FQ4 ($M = 2.3$). Based on the result we can infer that students form groups with people they feel comfortable to work with, understand their group members' characters, hence, they did not find that asking for their group members' help was something difficult.

4.3 Findings for Storming

This section presents data to answer research question 2- How does storming stage influence group interaction?

STORMING STAGE

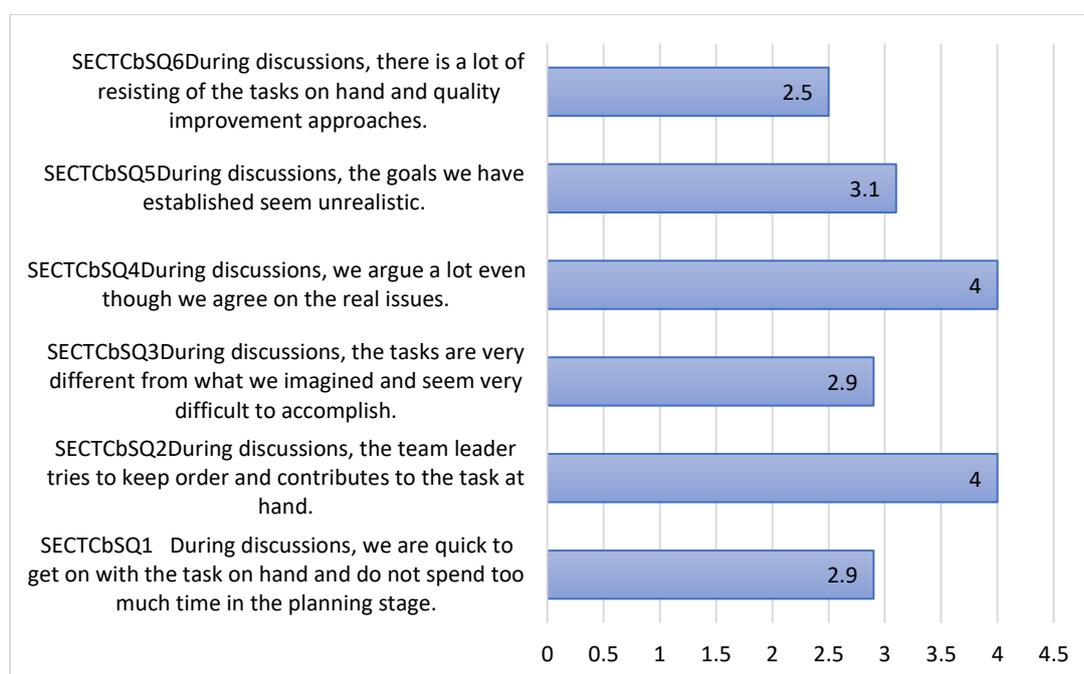


Figure 5-- Mean for Storming Stage

For the storming stage, the highest mean ($M = 4.0$) is generated for item SQ2 and item SQ4. Based on item 2, students agreed that the leaders appointed for their groups played their roles and managed the group work well. This can be seen in item 4 which shared the same mean value. In carrying out their tasks, they would argue with their group members, but the group leaders might be good at carrying out their responsibilities to keep everything in order. The lowest mean ($M = 2.5$) is generated for item SQ6. The result means that students disagreed that they would refrain from doing the assigned tasks and finding strategies to improve the quality of their group work.

4.4 Findings for Norming

This section presents data to answer research question 3- How does norming stage influence group interaction?

NORMING STAGE



Figure 6 -Mean for Norming Stage

For the influence of norming stage in group interaction, the mean values for every item is illustrated in Figure 6. The highest mean value is 4.4 for item NQ4. This shows that in a group work, the respondents very often accepted each other as members of their team. The finding for item 4 here correlates with the following item which is item NQ5 (M = 4.3). As discussed before, students accepted each other as group member therefore, they generally tried to achieve harmony by avoiding conflict with their group members. Next, the finding indicates that students also agreed that they very often take the team's goals and objectives literally, and assume a shared understanding with the mean value of 4.2. Finally, the lowest mean value is for the last item under the norming stage. From the questionnaire, it is revealed that the respondents did not frequently share personal problems with each other in their group as their focus would be more in completing tasks given by their instructors.

4.5 Findings for Performing

This section presents data to answer research question 4- How does performing stage influence group interaction?

PERFORMING STAGE

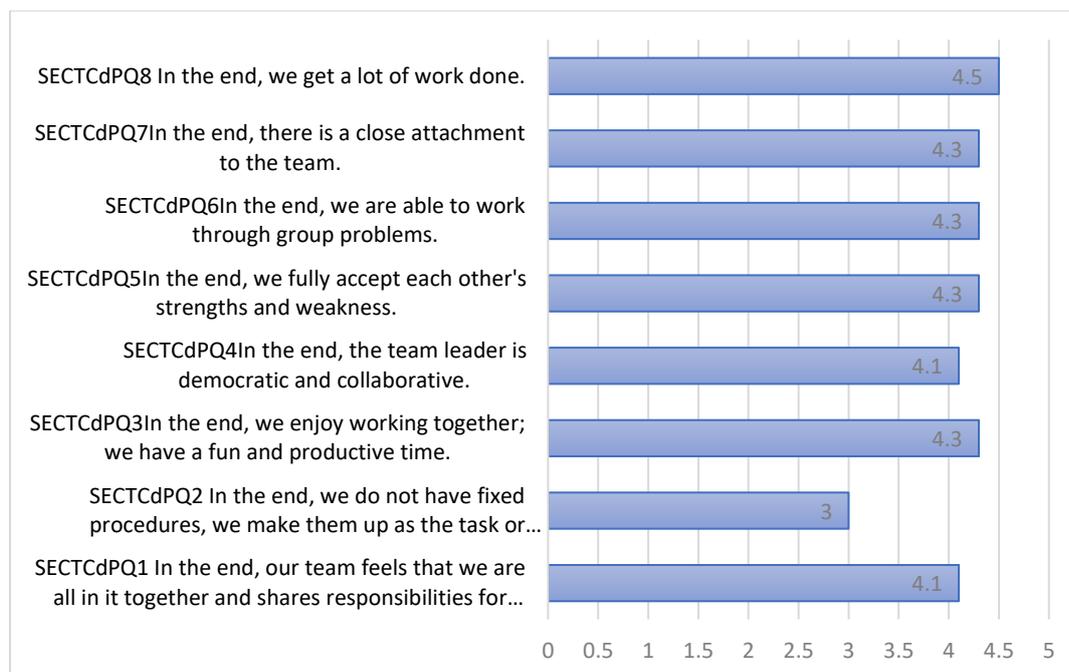


Figure 7- Mean for Performing Stage

The fourth stage in Tuckman's model is performing stage and the mean values for all the items in this stage are shown in Figure 7. The highest mean value is 4.5 for the final item which is PQ8. Here we could observe that in the end of the group work sessions, the respondents very often managed to get a lot of work done despite all the challenges that they faced (Le et al., 2018). For item PQ3, PQ5, PQ6 and PQ7, the mean value was analysed to be at the same figure which is 4.3. The findings here indicated that in the performing stage, students very often enjoyed working with their group members, accepted one another, managed to solve group problems and they found attachment with their group members. Finally, the lowest mean value is for PQ2 ($M = 3$). It can be implied here that students somehow have some kind of procedures that they abide to in completing the group task.

5.0 CONCLUSION

5.1 Summary of Findings and Discussions

The results indicate that in general a group requires their own procedures before working on their assignments. In addition, they need to appoint a group leader who plays a significant role in ensuring an effective management of a group. One does not only contribute to the group's task orderliness, but also gives a fair contribution to the group's assignment. Working together, it is important for all group members to accept and understand each other. These will help the group members to interact well and accomplish the task. The study findings based on Tuckman's model are consistent with several past studies conducted by (Abd Samad et al., 2023; Ibrahim et al., 2023; Kamarudin et al., 2023). They concluded that the stages in Tuckman's model were useful to guide students in communicating about the assignments and organizing them well.

5.2 Pedagogical Implications and Suggestions for Future Research

Tuckman's model should be integrated in classes which involve a lot of group activities. Furthermore, undergraduate students need to be able to work as a team as this is a soft skill highly sought after for future careers. Therefore, lecturers should guide students to

experience, internalize, understand and appreciate the dynamics of Tuckman's model rather than simply introduce it in lectures (Betts & Healy, 2015). This hands-on experience is more effective than only teaching students the concept in class. Hence, we hope that more research on Tuckman's model will be conducted to address the limitations of our study. As such future research can include more respondents in order to examine the differences between genders, study programs, and language proficiency. A pre-test and post-test can also be included if lecturers intend to test the effectiveness of an intervention on group work interactions.

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