

*Experiencing Group Development and Its Impacts Among Tertiary Students:
A Qualitative Inquiry*

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Abstract

Tertiary students are often exposed to group academic activities to learn critically important skills that contribute to student success. While navigating groups and working towards group goals, these students also learn valuable lessons and insights that lead to the development of 21st century skills like communication, collaboration, social skills, and social responsibility which are crucial to be learned as part of their preparation for work. This study aimed to explore students' experiences and learnings in group development and achieving group success. Using Content Analysis, with (n=30) college students, the researchers analyzed reflection essays of students to understand their experiences during a Group Dynamics class while accomplishing a group project based on Tuckman's model. Findings show that students have attained both individual and group learning as they navigate group activities. In addition, some of the student's experiences and learning are similar to the theory of Tuckman while other findings appear to be novel for their context. Implications of this study can help students at the tertiary level navigate groups better and attain group success. Professors can also take into consideration activities that help students develop critical skills to prepare them both as an individual and as a group member.

Keywords: Group Development, Group Dynamics, College Students, 21st Century Skills

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Introduction

Collegiate institutions through classroom activities prepare students as part of the workforce. As such, one of the critical skills needed to thrive in the 21st-century work environment is the ability to work with teams and teamwork. In the study of Bustos (2024), he discussed how certain skill sets need to be addressed to prepare college graduates for entering the labor market. Furthermore, he mentioned the need to strengthen the linkages between the labor sector and education through the improvement of curriculum and career guidance. In this study, the researchers present how non-student leaders learn through group development processes and the production of outcomes aligned with the Commission on Higher Education and evolving job markets.

Interaction among college students especially in group work offers many advantages as it contributes to a better learning experience. Teamwork can be an effective way of learning through team cooperation and encourages team members to participate in the process. Team-based learning (TBL) is identified by educators across a variety of disciplines as an effective pedagogical strategy (Leithwood, 2021). Marasi (2019) mentioned that group work helps students gain a better understanding of teams and the team development process as well as develop students' teamwork skills. Interdependence, interpersonal skills, and commitment are key to team effectiveness in working on students' final-year projects (Yusof et al. 2021). Students' reflections indicate that several skills were learned through their semester-long teamwork project, such as communication, collaboration, and friendship development (Van Horne & Rakedzon, 2024). Team-building, placed in an educational setting, takes on an added dimension as a pedagogical framework aimed at fostering group dynamics and familiarizing students with cooperative learning (Georgopoulou, 2024).

Linton et al. (2014) that students in group settings achieved significantly better than those in individual settings. Hammar (2014) also showed that group work facilitated learning in academic knowledge. In addition, those who work in groups gain advanced knowledge in academic knowledge, functioning as individual members, and how they behave and work in groups. This indicates that working in groups learned more compared to when working individually.

The Tuckman model is the most common model that is used to study group development and group dynamics (Kim & Iwuchukwu, 2022). Those who work together, usually follow a social structure to achieve their shared goals, which is considered similar to college students.

In a research article for Small Group Study (Akerlund et al., 2021), Wheelan developed the Integrated Model of Group Development (IMGD) following the concept of Tuckman (1965), Bion, (1961), Bennis and Shepard (1956), and Bales (1965). The IMGD describes how groups go through four distinct stages up to termination stages similar to Tuckman.

The first stage is called Dependence and Inclusion which is similar to the Forming stage of Tuckman. Its salient feature revolves around being dependent on the leader while having reservations about expressing the thoughts and divergent views of the rest of the members. Stage two is termed Counter-Dependence and Fight which is similar to Tuckman's Storming Stage. As the team progresses, members start expressing different views but have difficulty integrating themselves due to personal and task conflicts.

Stage three is named Trust and Structure, parallel to Tuckman's Norming Stage. Here, members realized that they were supposed to blend and become interdependent on one another, as they geared towards focusing on the common goal. Stage 4 is called Work and Productivity similar to Tuckman's Performing Stage. This stage describes how members continue to work on their different roles and work processes where effectiveness, work satisfaction, and cohesion are high. Originally, Bruce Tuckman developed only four stages of Team Development in 1965 but he added a fifth one called Adjourning Stage in 1977. This stage occurs when a group wraps up its work or project and then they eventually part ways. Whellan calls this fifth stage the Work Termination Stage. In this stage, Whellan states that this is an opportunity to look back and learn from experiences.

Marshall Poole's multiple sequence Model (1983) is a descriptive system for studying multiple sequences in a group process. In essence, his discussions are not characterized by phases or blocks but by intertwining tracts of activity and interaction. Eventually, he suggested three activity tracks namely: (1) Task Progress; (2) Relational; and (3) Topical Focus, wherein when the said tracks are interspersed with what he calls "breakpoints," it will create marking changes in the development and links between them. His concept of breakpoints includes: Normal Breakpoint pace with topic shifts and adjournments; Delays as another breakpoint are holding patterns of recycling through information and Disruptions break which is a point were discussion threads with conflict or task failure.

Despite the advantages and learnings achieved in group work, it also presents challenges among students. Hammar (2014), mentioned that group work is perceived as ineffective due to loss of focus and the presence of conflicts, which works against learning. Apparently, group climate and group processes might be the source of negative conceptions of the group and hamper learning. Another study (Wilson et al., 2018) stated that students and instructors experience a common problem when involved in group work and one of the most commonly reported problem is uneven workload (free-riding or overbearing students), social loafing, and time consuming activities to group work (Chang & Brickman, 2018). Similarly, another study conducted by Benson et al. (2019), mentioned that one aspect which can affect the success and failure of groups is how they were formed.

In relation to this study, many quantitative studies have been conducted on the perception of group work among students, however less research was done to investigate the perception of learners on group work using Tuckman's Model. Hence, this study is done to investigate the perception of learners on group work through Tuckman's model.

Background of the Study

Every school year, the Jose Rizal University conducts curriculum review with the aim to continuously improve the curriculum offering of the university. One of the areas that the university looks at is the student learning experience. Using the result of the student learning survey and student satisfaction survey, the researchers deploy a plan to improve the teaching methodology and pedagogy of the Group Dynamics course to address the student learning experience by enhancing its syllabus.

The university offers a Group Dynamics Course as one of the major courses under the Bachelor of Science in Psychology Curriculum. The curriculum is divided into eight semesters with a total of 7 to 8 course offerings per semester. One semester is equivalent to 18 weeks and the learning modality is hybrid learning. The 18 weeks are divided into 3 terms

which are as follows: Prelim, Midterm, and Final Term. The course offering enhancement includes understanding the Tuckman's Stages of team development by teaching its concept during the Prelim Term.

Research Questions

This study aims to enhance the learning of the students enrolled through a group setting. The main learning objective of this course is to provide students the opportunity to understand the dynamics of group process and functioning particularly in the Philippine organizational setting in the areas of communication, problem-solving, decision-making, leadership, membership, collaboration, competition, and self-awareness. Using Tuckman's stages of team development, the researchers wanted the student to bring their understanding of the team development stages into experiential learning. Specifically, this study answered the following questions: 1) How do students view and experience group development? What model is proposed to explain their view and experience of group development?

Methodology

Research Design

This qualitative study is done to explore the perception and experience of group work through Tuckman's model among tertiary student learners. In this study, the researchers used Content analysis to understand the themes and concepts of students' views and perceptions as they go through the five stages. Content analysis is a method of qualitative approach to analyzing texts and textual analysis (McKee, 2003; Mayring, 2014).

Sample

This student utilized a purposive sample of 30 participants (9=males, 21=females) out of 158 students who submitted weekly reflections on their experience of Tuckman's model while doing group work. To ensure that the researchers get a fair sample from the three section participants, each section had been randomly picked with 10 participants. The inclusion criteria used to ensure that the participants fit the study are 1) 3rd year student currently enrolled in the group dynamics class; 2) have started and completed the project with the same group; 3) not occupying a leadership position within the group; 4) complete all reflection papers and is willing to participate in the study.

Data Gathering

Within this term, the students are grouped randomly and were tasked to blend and brainstorm on a particular project where they can experience the whole process of Tuckman's Team Development.

The professor allowed the students to interact with one another after they were randomly grouped. They were just instructed to choose among themselves a leader who would facilitate the project and a secretary to document the progress of the group project. They were given the freedom to decide what particular project they wanted to work on. They were also given a criterion as follows: (1) it should happen within a 6 to 8-week time frame; (2) No solicitation (3) Everyone should be given a role or a task to play (4) consciously undergo the stages of team development and submit weekly individual reflection as they go through the stages. (5)

Submit a progress report of the project they are working on. All submissions have specific deadlines and are submitted in an online learning management system that is being used by the university.

The reflections submitted by the students were carefully reviewed by the researchers and provided the necessary intervention for groups that were having challenges while undergoing the process of working on the project. Furthermore, the researchers reiterated to the students to be mindful of the experience and that the project is only the means to experience the team development stages. As they progress with their respective project, the researchers observe the dynamics of the individual as well as the group behavior manifesting in each project execution.

Data Analysis

Qualitative content analysis as used in this study uses inductive analysis. This means that the researchers started by examining the data to identify the topics, issues, and messages that mostly occur and then moves back and forth from identifying specifics in texts to making inferences about what those elements might reveal about the speakers, authors, or audience effects. Thus, inductive qualitative content analysis draws on grounded theory approaches (Glaser & Strauss, 1967; Strauss & Corbin, 1990). In this study, each of the reflection papers of the 30 participants as they go through group development stages were analyzed, coded and themed by 3 researchers. As the codes arose, the researchers had agreed to the themes that most represented the reflection thoughts of the students.

Results and Discussion

This study shows that students who experience group development and team-based learning are transformed and have better learning experience (Leightwood, 2021). As students experience transformation while experiencing the stages of team development, they discover their innate capabilities as well as their ability to blend, compromise, collaborate, and make group decisions. Hammar (2014) also showed that group work facilitated learning in academic knowledge. Moreover, the student's individual as well as group experiences created a behavioral and conceptual pattern for each stage leading to accumulating new experiences. Each stage manifested a definition of their cumulative experience which continuously developed up to the last stage creating a whole discovery of the essence of the Tuckman Model translating the concept to practical knowledge and skill.

Table 1: Summary of Analyses

Stages	Definition	Experiences	Impact
Forming	Familiarization	Bonding	Optimistic
Storming	Conflict	Compromise	Closer Relationship
Norming	Clarity	Comfortability	Stronger sense of optimism
Performing	Collaboration	Productivity	Forming bonds
Adjourning	Collective Success	Transformative	Establishment of connections

Table 1 above shows the metamorphosis of the students' experience as they consciously traverse each stage while doing their group project. The three main concepts were derived from analyzing their reflections using content analysis.

Team development is the core objective of the Group Dynamics Course. After extensively discussing the concept of Tuckman's team development, students were randomly grouped with 5-6 members. The group was given a chance to choose a particular project that they could work on given a 6–8-week time frame. During the Forming stage, the majority of the group achieved familiarization that led to them creating a bond among themselves. This created an optimistic atmosphere in the group (Georgopoulou, 2024).

It was evident during the Storming stage the struggle each member of the group experienced brought about by personal differences, biases, and conflicts of ideas and interests. Tuckman also believes that teams often experience conflict that must be overcome to successfully advance through various stages of team development (Tuckman, 1965). It was in this stage that students learned to compromise which resulted in forming closer relationships among the group members. Marasi (2019) mentioned that group work helps students gain a better understanding of teams and the team development process as well as the development of their teamwork skills.

As the deadline of the project approached, the group continued to meet and discuss strategies and approaches to execute their projects successfully. This exercise brought clarity on the roles each member will play which eventually led them to be comfortable working together. The excitement is evident in their narratives as they experience the Norming stage. A stronger sense of optimism manifested.

Interestingly, there was an overlap of experiences during the Norming and Performing stages. The planning, preparation, and execution continue to shape each group member's attitude and behavior which led them to collaborate and to become productive. Similarly, Klang and Luria (2021) states that those teams who form close relational bonds are more likely to experience higher levels of team effectiveness. In the process, they realize that this joint effort is leading them to bond even closer. Students' reflections indicate that several skills were learned through their semester-long teamwork project, such as communication, collaboration, and friendship development (Van Horne & Rakedzon, 2024).

The adjourning stage generally created an atmosphere of excitement and realization. Most of the projects were executed as expected with some adjustments on logistics and other minor concerns which they readily overcame due to the formed group's resilience. Collective success was the general theme formed during this stage. Moreover, their individual experiences were described to be transformational since they made a lot of self-discoveries about their capabilities. The unique Filipino culture eventually manifested. Instead of them parting ways because the project was over, they did the opposite. They established connections that paved the way for closer relationships.

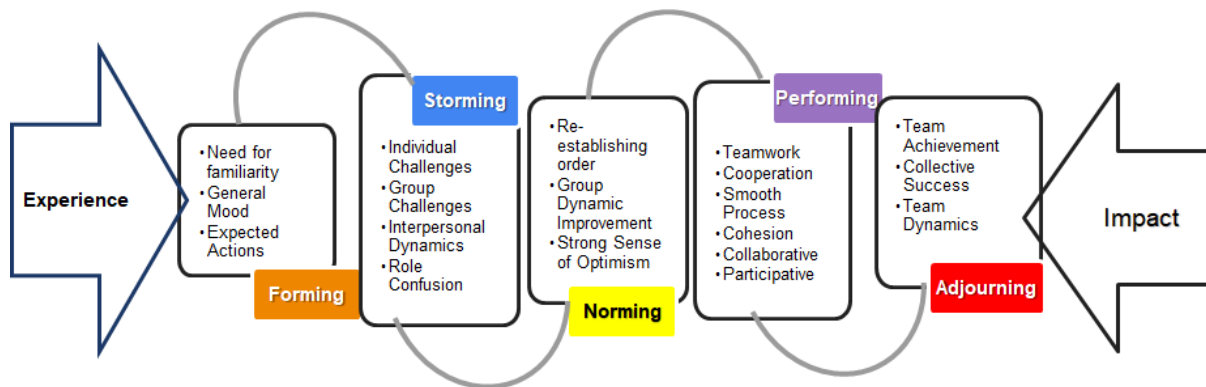


Figure 1: Conceptual Framework

Figure 1 above shows the conceptual framework of the result of this study. Interestingly, the occurrences of experiences in various stages somehow linger and are carried over into the next stage/s. Those experiences led the students to discover their individual capabilities, led them to be more confident, and motivated them to engage and commit to the success of their projects. Similarly, their view about the concept of teamwork deepens. It made them appreciate individual differences and learn to be cooperative and collaborative. This coincides with the study of Marasi (2019) which points out that group work helped students gain a better understanding of teams and the team development process and teamwork skills (Marasi, 2019).

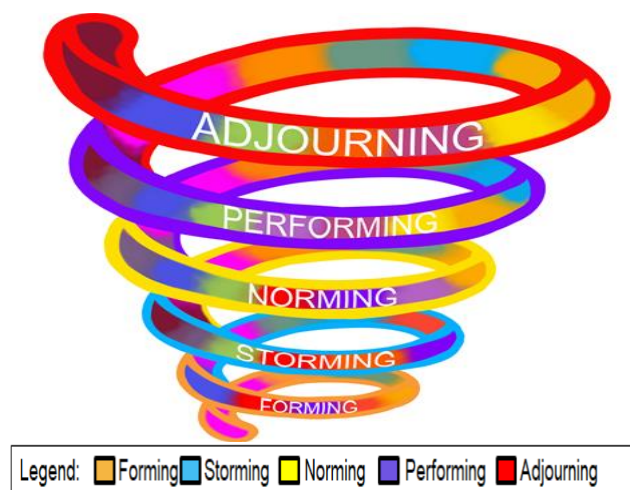


Figure 2: Group Development Model

Group Development Journey

This group development model depicts the collective experience of the participants as they underwent the group development journey. In this journey, they discovered their individual traits and capabilities. Furthermore, positive and negative social skills, interpersonal (Yusof et al., 2021), and intra-personal continued over time—depending on the development of the group’s relationship. Lastly, combining traits, capabilities and having a shared goal (Kim & Iwuchukwu, 2022) led them together to form team relationships that they were able to sustain even after the project was done.

Team building, placed in an educational setting, takes on an added dimension as a pedagogical framework aimed at fostering group dynamics and familiarizing students with

cooperative learning (Georgopoulou, 2024). Similarly, Yusof et al. (2021) posited that Interdependence, interpersonal skills, and commitment are key to team effectiveness in working on a student's final-year project. Furthermore, students' reflections indicate that several skills were learned through their semester-long teamwork project, such as communication, collaboration, and friendship development (Van Horne & Rakedzon, 2024).

It was observed that the group experiences between stages had an overlap of understanding and practice that went deep and wide. It can be gleaned that Filipinos by nature and according to their culture are collectivistic. In the book entitled *Step Back Leadership* by Lloyd Luna (2019), it was mentioned there that it is innate among Filipinos, particularly the Ifugao tribe have a deep sense of community and what it means for each member (p. 40). Furthermore, Filipinos have the ability to self-organize themselves during the pre-colonial times (Ibid, p. 74).

The Tuckman's concept of team development somehow awakens the sense of community among and between group members and in the process, they rediscover the beauty of working in unity and harmony. This study unearthed the innate qualities of Filipinos that are engraved not only in our culture but in the individual being. The concept of "Bayanihan" translated as "cooperative endeavor" naturally came about while working with teams. Another Filipino term "pakikisangkot" (involvement) and "pakikiisa" (solidarity) spontaneously manifested while working together. Finally, "malasakit" (showing concern) sealed the overall experience as it manifested during the adjourning stage and beyond.

Limitation

The limitation of this study is that the respondents all under one program which is Bachelor of Science in Psychology, particularly third-year students only. The respondents of the study are participating in a group dynamics project, but they may also be doing group activities in other courses where they interact beyond the researchers control.

This study is homogenous to students who are in non-leadership positions, so the views are separated from those in leadership roles. The students worked on their projects within a definite time frame so this might have given them some pressure and affected their responses. The students as a group were asked to choose their projects which influenced their motivation upon doing the project.

Conclusion

As the students underwent working in groups as a pedagogical strategy, they created various positive and better learning experiences which can be adapted to different school activities and settings. Although it was observed that the group experiences between stages had an overlap of understanding and practice that went deep and wide, it can be gleaned that team development somehow awakens the sense of community among and between group members while in the process of working together.

Considering the results of this study, further research exploration should be about experiential learning by groups or teams and how they may be adopted as part of learning methodology in college especially in higher years (junior and senior level) across all programs/degrees. Students being given an avenue to sustain the experiences of skills and knowledge discovered (i.e. group research or capstone projects).

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References

- Åkerlund, M., Jacobsson, C., & Tilin, F. (2021). *The legacy of Susan Wheelan*. *Small Group Research*, 52(1), 103-109. <https://doi.org/10.1177/1046496420956713>
- Benson, A. J., Jeschke, J., Jordan, C. H., Bruner, M. W., & Arnocky, S. (2019). Will they stay or will they go? Narcissistic admiration and rivalry predict ingroup affiliation and devaluation. *Journal of Personality*, 87(4), 871-888. <https://doi.org/10.1111/jopy.12441>
- Bustos, R. (2024). Bridging the gap: Aligning higher education priorities with the shifting Job landscape in the Philippines. *Recoletos Multidisciplinary Research Journal*, 12(1), 9–24. <https://doi.org/10.32871/rmrj2412.01.02>
- Chang, Y. & Brickman, P. (2018). Title. CBE—Life Sciences Education. <https://creativecommons.org/licenses/by-nc-sa/3.0/>
- Georgopoulou, M. (2024). The power of synergy: Unlocking the Potential of Group Dynamics Through Team-Building Practices in Junior High School. *European Journal of Education and Pedagogy*, 5(2), 12–21. <https://doi.org/10.24018/ejedu.2024.5.2.803>
- Hammar-Chiriach, E. (2014). Group work as an incentive for learning and student experiences of group work. *Frontiers in Psychology*, 5. <https://doi.org/10.3389/fpsyg.2014.00558>
- Kim, D., & Iwuchukwu, O. F. (2022). Improving team dynamics for project-based learning in pharmacy: A multimodal approach. *Currents in Pharmacy Teaching and Learning*. <https://www.sciencedirect.com/science/article/abs/pii/S1877129722000831>
- Klang, M., & Luria, G. (2021). Group bonding and effectiveness: Cohesion's moderating role and leaders' relationship mediating role. *Small Group Research*, 52(4), 431–456, doi:10.1177/ 1046496420977915
- Leithwood, K. (2021). "Team learning processes", *Organizational Learning in Schools*, Taylor and Francis, London, pp. 203-217.
- Linton, D. L., Farmer, J. K., & Peterson, E. (2014). Is Peer Interaction Necessary for Optimal Active Learning? *CBE—Life Sciences Education*, 13(2), 243–252. <https://doi.org/10.1187/cbe.13-10-0201>
- Luna, L. (2019). *Stepback leadership*. <https://stepback.ph/book-blurb/>
- Marasi, S. (2019). "Team-building: Developing Teamwork Skills in College Students Using Experiential Activities in a Classroom Setting," *Organization Management Journal*: Vol. 16: Iss. 4, Article 9. Available at <https://scholarship.shu.edu/omj/vol16/iss4/9>
- Mayring, P. (2000). Qualitative Content Analysis. *Forum: Qualitative Social Research*. <http://www.qualitative-research.net/index.php/fqs/article/view/1089/2385>

McKay, J., & Sridharan, B. (2023). Student perceptions of collaborative group work (CGW) in higher education. *Studies in Higher Education*, 49(2), 221–234. <https://doi.org/10.1080/03075079.2023.2227677>

McKee, A. (2003). *Textual analysis: A beginner's guide*. London: Sage.

Poole, M. S. (1983). Decision development in small groups, III: A multiple sequence model of group decision development 1. *Communication Monographs*, 50(4), 321–341. <https://doi.org/10.1080/03637758309390173>

Tuckman, B. W. (1965). Developmental sequence in small groups. *Psychological Bulletin*, 63(6), 384–399. <https://doi.org/10.1037/h0022100>

Van Horne, C. & Rakedzon, T. (2024). Teamwork Made in China: Soft Skill Development with a Side of Friendship in the STEM Classroom. *Educ. Sci.* 2024, 14, 248. <https://doi.org/10.3390/educsci 1403024>

Wilson, K. J., Brickman, P., & Brame, C. J. (2018). CBE Life Sci Educ. doi: 10.1187/cbe.17-12-0258

Yusof, N., Hussein, R., Hashim, R., Mansur, A. B. F., Malik, S., Bajnaid, N., & Mohd Arif, S. (2021). Teamwork effectiveness in student's final year project. *International Journal of Emerging Technologies in Learning (iJET)*, 16(15), pp. 4–15. <https://doi.org/10.3991/ijet.v16i15.23705>