

**Analyzing Student Experience on Group Work with the Application of Different Group  
Allocation Approaches**

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## **Analyzing Student Experience on Group Work with the Application of Different Group Allocation Approaches**

Working as a group can be as challenging as working by oneself. This is not only applicable to group work in an organization, but also at school students are asked to work as a group. Working in a group can be tricky because it indicates collaboration and shared responsibilities. When a group of students was asked if they preferred to work individually or collaboratively, Brown and McIlroy (2011) found that 68.9% of students preferred to work on individual projects, as compared to 26.4% who preferred group assignments, and 4.6% who had no preference. Common issues like ineffective group work, unequal work contribution, and poor communication are believed to be the reasons why many students preferred to work individually.

The purpose of this study is to understand if there is a disparity in student experience on group work by implementing different methods of group formation, which are, intentional group formation and random assignment. Topics surround team well-being, team communication, and team effectiveness are the focus of this study because it is believed that these are the major determinants of students' group work experience.

The second contribution of this study is that it signifies the students' opinions on whether or not there is a difference in student group work experience when students are working together in person or online during the COVID-19 pandemic. Although online learning can be efficient and convenient where it has more flexibility on time and place, it can also be challenging due to the lack of motivation and human interaction. Even before the COVID-19 pandemic, research has found 60% of students regarded online learning as a distant and less personable experience as compared to in-person classes, due to the difficulty in understanding vocal and nonverbal social cues in an online setting (Carter, 2013). Acknowledging what students are experiencing and how they are feeling about working

virtually as a group, as well as their opinions on whether or not it makes a difference if they are working in-person, allow us to gain better insights if the student group work experience is exclusively determined by the methods of group formation or the current circumstances of the COVID-19 pandemic, or a mixture of both.

### **Literature Review**

In the past, there were many researchers who believed that a diverse group dynamic would result in enhanced student group work experience. Even though student group work experience was the outcome to be evaluated in these studies, there were various circumstances which the researchers supposed would have an impact on student group work experience; for instance, learning styles, personality traits, skills, and course delivery methods.

### **Learning Styles**

Learning styles are believed to have potential effects on one's group work experience since one's preference for absorbing, processing, comprehending, and retaining information may vary within groups. Assigning different types of learners in a group may balance out the group dynamic; however, it is possible that some group members may not have the best group work experience since there are members who have total opposite learning styles of theirs. Huxham and Land (2000) performed a study on 243 students to discover if balanced groups have better performance than randomly assigned groups. A group of students was assigned to balanced groups where the groups are created according to learning styles, while another group of students was assembled into groups randomly. All students were first-year students of the Biological Sciences degree course during the winter term of 1996 at Napier University, and the group work for all students in this course was a peer-assessed poster project. It is found that there is no evidence that balanced groups indicated significant differences in their group performance, and that students in these groups did not show remarkable different perceptions about the group formation. The researchers argued that this may be due to the fact that

intentionally designing groups for group work in higher education is futile. The test and/or the measures of success applied in the study were also discussed to be unsuitable. Even though the test was valid, the researchers claimed that the methods of group formation may be inappropriate.

### **Personality Traits**

Personality traits of an individual are believed to have an effect on student performance, and this may further affect the satisfaction of group work experience when groups are formed with people with different personality traits are. Müller, Bellhäuser, Konert, and Röpke (2021) carried out an experimental study by hypothesizing that students may have better group work experience if groups were formed heterogeneously in extraversion, and homogeneously in conscientiousness. The groups in this study were categorized based on two personal traits – extraversion and conscientiousness, which are then classified with two levels – homogeneous and heterogeneous. A total of 124 groups were formed with the 372 participants in this study, where groups of three were formed. All participants were enrolled in an online voluntary university preparation class at a technical university in Germany. The hypotheses of the study were not supported where there was no significant main result showing that group formation based on personality traits has an effect on student satisfaction and performance.

### **Skills**

In a study by Hilton and Philips (2010), students who were enrolled in an introductory financial accounting course are allowed to select their own group or be assigned by their instructor. Students who chose the latter were split into groups by an arbitrary manner or heterogeneous group formation condition where students were organized into groups of four which were equally balanced in terms of math, writing, and people skills. Students were then asked to express their group work experiences by writing in journals at four equally spaced dates during the group project of their course. It is found that there are no notable differences

in group experience between the random and heterogeneous groups, and in fact, all groups shared many similar experiences and outcomes.

Another study by Muller (1989) also focused on whether or not students in balanced groups had better group work experience than those who were assigned randomly. This study was participated by 130 students who were all in the fourth and final year of a Bachelor of Commerce program, and students were asked to answer a 12-item questionnaire that measured student's skill and experience background. The findings show that students in balanced groups felt more satisfied with their group, more challenged by their group, and students felt that the workload was shared evenly. It is also found that students who were assigned to groups randomly showed a negative attitude about their learning experience. The researcher encouraged instructors to design a questionnaire that assesses student's backgrounds and to administer it to all students because it is believed students' group work experience can be enhanced if they are being allocated to groups based on their academic skills and experience.

### **Course Delivery Methods**

Methods of course delivery may have an impact on student satisfaction as well. Even though the same course materials are being used in various settings, student satisfaction and well-being in a course may still be affected due to less physical interaction and low motivation. A study by McFarland and Hamilton (2006) provides insights about students' overall course satisfaction between online and traditional classroom. Subjects involved in this study were seniors who were enrolled in a required E-Business course, and students were able to choose the traditional section or the online section based on their preference. Surveys were sent to the students during the first class and the last class, and the results were tested with Chi-Square analysis. The result of the study showed that there was no significance in overall course satisfaction between students who studied online and students who studied in a traditional manner.

Driscoll, Jicha, Hunt, Tichavsky, and Thompson (2012) also carried out a similar study where the researchers compared student satisfaction in an online versus face-to-face introductory sociology course. There were 368 students who engaged in this study, and analysis was carried after students participating in an online survey which was sent to the students in the course at the end of each term. Results from this study were similar to the aforementioned study, where student satisfaction did not significantly differ across two settings.

The hypothesis of this study is that students who are assigned to group with intentional group formation method have a better group work experience than students with random group formation. It is also hypothesized that different methods of course delivery do affect students' group work experience, where students may feel that in-person classes may result in better group work experience.

### **Materials and Methods**

This section details a survey that will be conducted to compare the two methods of group formation – intentional group formation and random assignment. In this section, the procedure for the study and the description for data collection are discussed.

Before proceeding, this study is reviewed and approved by Cal Poly Institutional Review Board (IRB) since this is a human subjects research. The intentional group formation method is done by delivering a intentional group formation with questions about working styles before group allocation, while the random assignment approach is carried out arbitrarily. It is hypothesized that students have a better group work experience when intentional group formation is conducted before assigning them into groups.

To minimize the effects of external factors like student background and class material, this study is designed to solely focus on students who enrolled in BUS387 (Organizational Behavior) at California Polytechnic State University, San Luis Obispo in the Winter of 2021. One of the professors of this class, Professor Calvin Stevens, implements the intentional group

formation method where he asks his students questions about their working styles and later categorizes them into four types – Analytical, Driver, Amiable, and Expressive. Another professor of this class, Professor Patricia Dahm, assigns teams randomly with one criterion, which is to balance the team by gender. Both professors have been applying their preferred approaches to arrange students into groups for approximately five years.

In this study, methods of group allocation are the independent variable, while student experience on group work is the dependent variable. As most people are currently working remotely due to COVID-19, the question of whether or not there is a difference in student experience on group work, and whether or not the application of different group assignment methods has an effect is another area that is worth looking at. Questions regarding student group work experience during this unprecedented time are also asked in the survey.

In this study, data are collected anonymously, stored on Google Forms, and analyzed on R. After the students have agreed on voluntarily participating in this study on the consent form, which is the first page of the survey, the survey begins by asking students some general questions. For instance, “What is your current year at Cal Poly?”, “Are you a transfer student?”, “To which gender identity do you most identify?”, and “How many people are there in your group for your Organizational Behaviour (BUS387) group project?”. These questions are generated to collect some general information from the participant, as well as to gain some potential insights when analyzing the data. For example, to distinguish if there is any difference between student satisfaction between second-year and third-year students, transfer and non-transfer students, as well as male and female students.

The main constructs in this study are team well-being, team communication, and team effectiveness. Questions focus on these constructs are stated on Question 7 and Question 8, and both questions have the same number of statements that reflect the participants’ feelings about their group work experience in their BUS387 class. Specifically, Question 7 includes

statements about their group work experience in general, while Question 8 asks the participants if they think there will be a difference in their group work experience if the class is not held in a virtual setting. In both questions, statement (a), (b), (c), (d), (e), and (n) focus on team well-being, statement (f), (g), and (h) concentrate on team communication, and statement (i), (j), (k), (l), and (m) emphasize on team effectiveness. To measure the participants' level of agreement with the statements, participants are asked to rate on a five-point Likert scale by indicating if they *strongly agree*, *agree*, *neither agree nor disagree*, *disagree*, or *strongly disagree*. Some examples in Question 7 include "I feel motivated by working with my group on this assignment," "My groupmates and I communicate well," and "I feel that my group contains people with various skill sets." Some statements in Question 8 are "Whether my group and I are working together physically or remotely, it would make no difference to me for feeling motivated by working with my group on this assignment," "Whether my group and I are working together physically or remotely, it would make no difference to me and my groupmates to communicate well," and "I feel that my group contains people with various skill sets. To me, there would be no difference in this whether my group and I are working together physically or remotely." Please see Appendix for the survey used to collect student responses.

## **Results**

Table 1 outlines the basic information of the participants in this study. Sixteen students took part in this study, and all of them are students who are majoring in Business Administration at Cal Poly, San Luis Obispo. Specifically, 62% of them are juniors and 38% are sophomores. In this study, half of the participants are transfer students, and there are more male participants as compared to female participants. Most of them the students were assigned to a group of five, and only two of them were in a group of six. Nine participants were being assigned to groups through the method of intentional group formation, while seven of them were being assigned to groups arbitrarily.

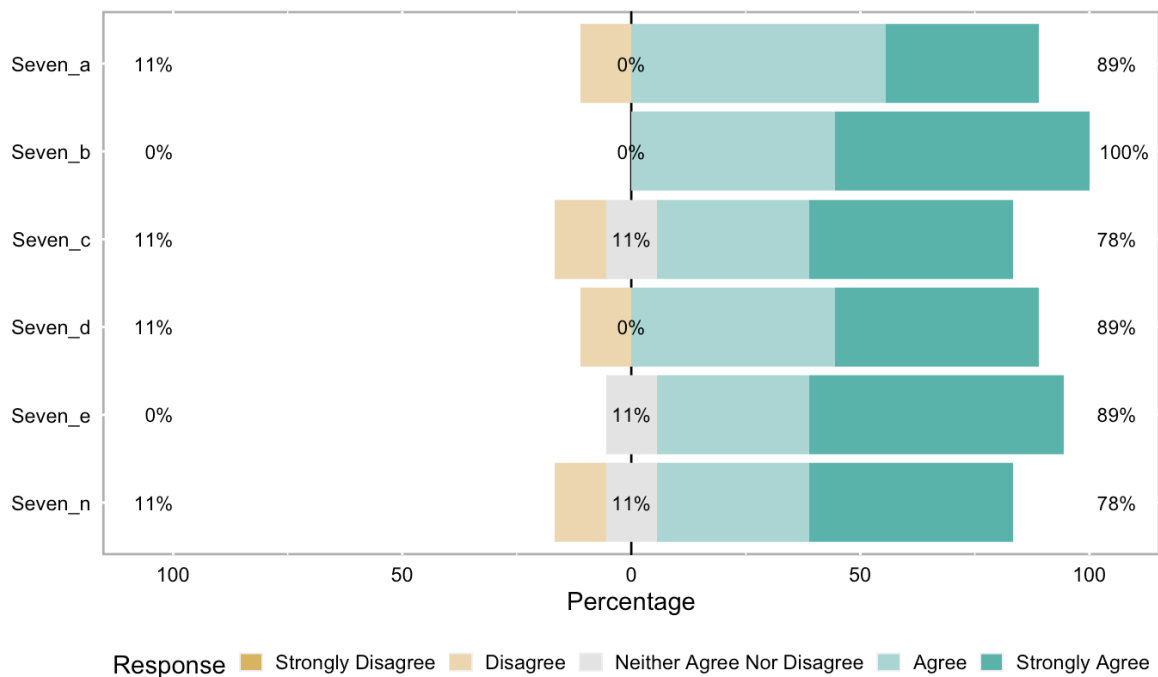


**Table 1***Summary of Participant Information*

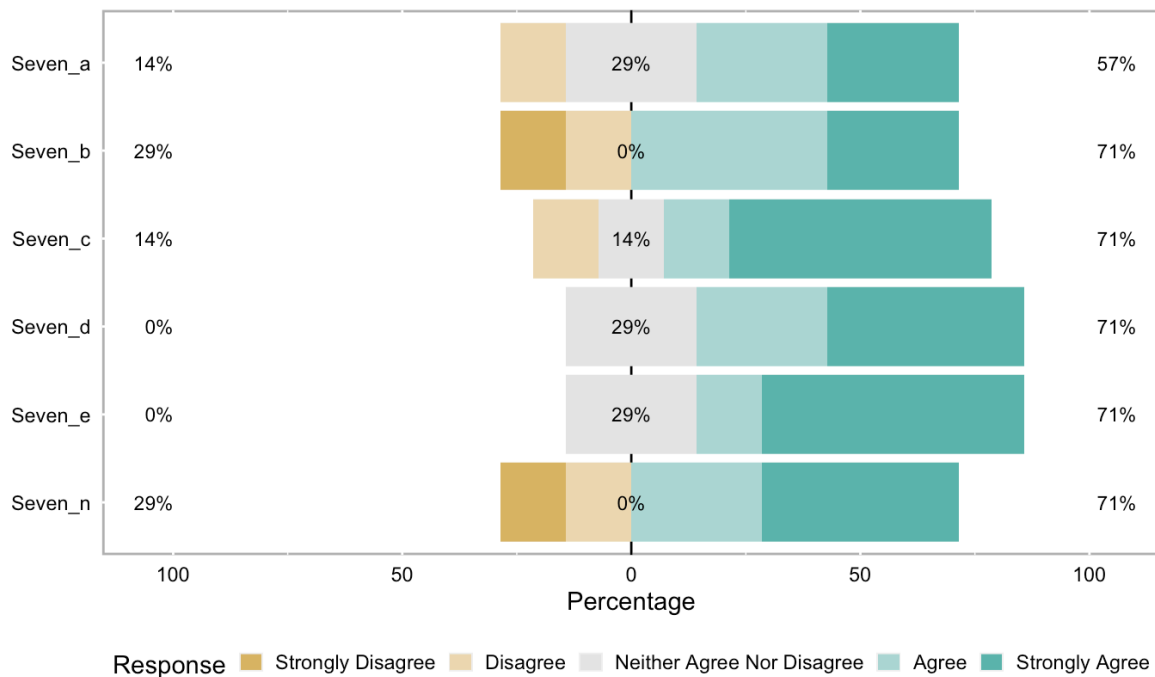
<b>Characteristic</b>	<b>Number of Participants (N=16)</b>
<b>Major</b>	
Business Administration	16 (100%)
<b>Year</b>	
Second Year	6 (38%)
Third Year	10 (62%)
Transfer	8 (50%)
<b>Gender</b>	
Female	7 (44%)
Male	9 (56%)
<b>Number of Group Members</b>	
5	14 (88%)
6	2 (12%)
<b>Group Formation</b>	
Intentional Group Formation	9 (56%)
Random Assignment	7 (44%)

**Team Well-Being**

Figure 1 shows that students who were assigned to groups with intentional group formation are in agreement that they had good experience about team well-being, where around 87.2% of them concurred that they felt motivated, safe, and confident. All of the participants in this group resonated with the statement “I feel safe to state my views and opinions in this group.” When students who were assigned to groups randomly were asked with the same set of questions, they seemed to have different point of views where on average only 68.6% of them agreed that they experienced healthy team well-being. It is also noticeable on Figure 2 that around 14% students strongly disagreed that they had a good experience with their group, while on average 16.8% of them were indifferent.

**Figure 1***Participant Perceptions of Team Well-Being with Intentional Group Formation*

*Note.* Seven\_a: “I feel motivated by working with my group on this assignment.” Seven\_b: “I feel safe to state my views and opinions in this group.” Seven\_c: “I am confident about my group assignment for this class.” Seven\_d: “The skill sets that my groupmates and I have makes me feel confident about my group assignment for this class.” Seven\_e: “I feel that my group and I have the same goal for this class, and we work together for it.” Seven\_n: “My group work experience in this class is good thus far.”

**Figure 2***Participant Perceptions of Team Well-Being with Random Assignment*

*Note.* Seven\_a: “I feel motivated by working with my group on this assignment.” Seven\_b: “I feel safe to state my views and opinions in this group.” Seven\_c: “I am confident about my group assignment for this class.” Seven\_d: “The skill sets that my groupmates and I have makes me feel confident about my group assignment for this class.” Seven\_e: “I feel that my group and I have the same goal for this class, and we work together for it.” Seven\_n: “My group work experience in this class is good thus far.”

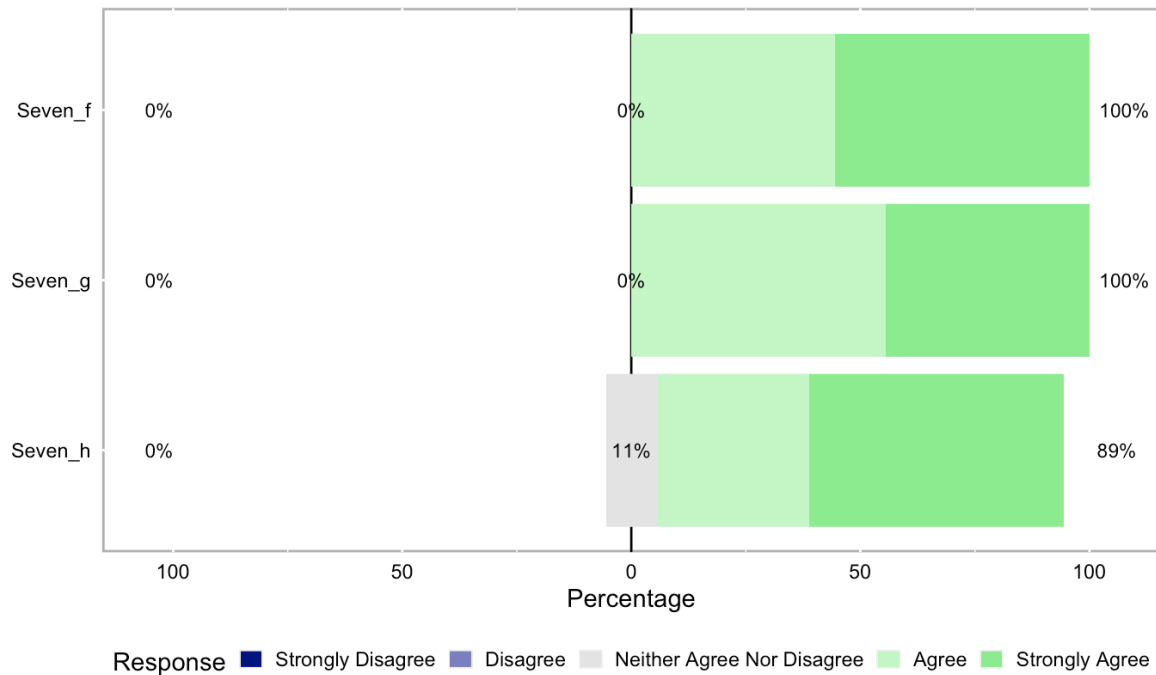
**Team Communication**

According to Figure 3, students who were assigned to groups with intentional group formation all agreed that they had good team communication, with approximately 50% of them strongly agreed so. Not only did the students agree that they communicated well with their groupmates, but also they communicated respectfully when there were differences and could get in touch with their groupmates when they needed to. However, part of the students

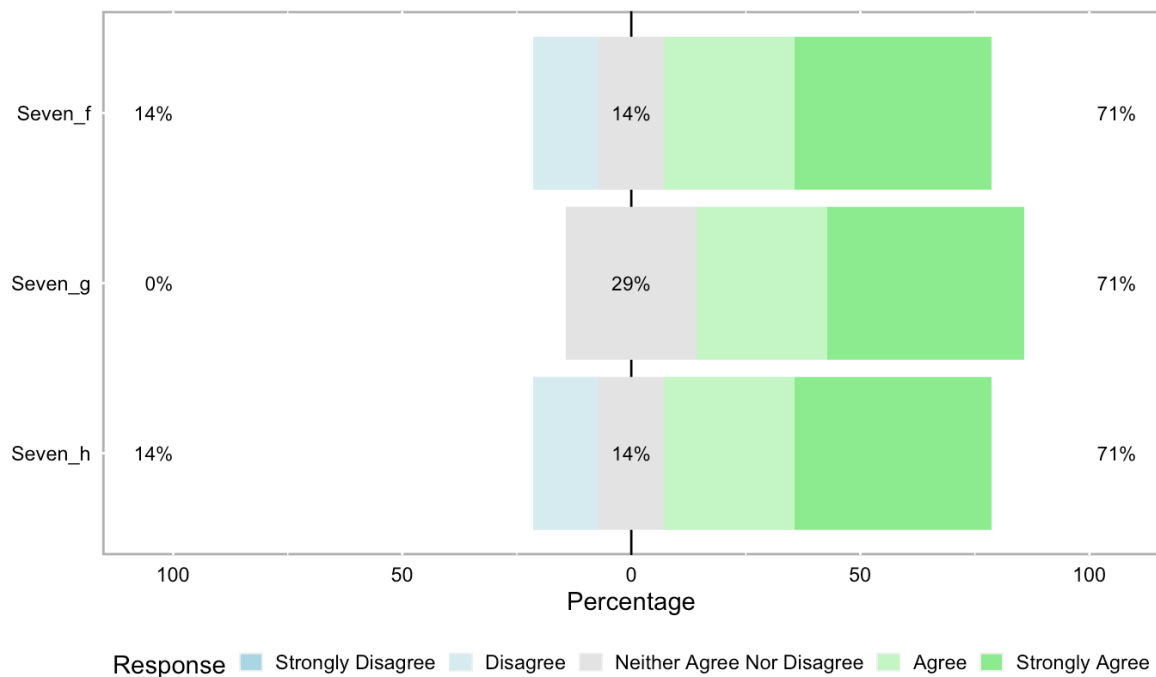
with random group formation did not have the same experience where 9.3% of them disagreed and 19% of them were neutral about the statements.

**Figure 3**

*Participant Perceptions of Team Communication with Intentional Group Formation*



*Note.* Seven\_f: “My groupmates and I communicate well.” Seven\_g: “My team communicates respectfully about differences when they arise.” Seven\_h: “I can get in touch with my groupmates when I need to.”

**Figure 4***Participant Perceptions of Team Communication with Random Assignment*

*Note.* Seven\_f: “My groupmates and I communicate well.” Seven\_g: “My team communicates respectfully about differences when they arise.” Seven\_h: “I can get in touch with my groupmates when I need to.”

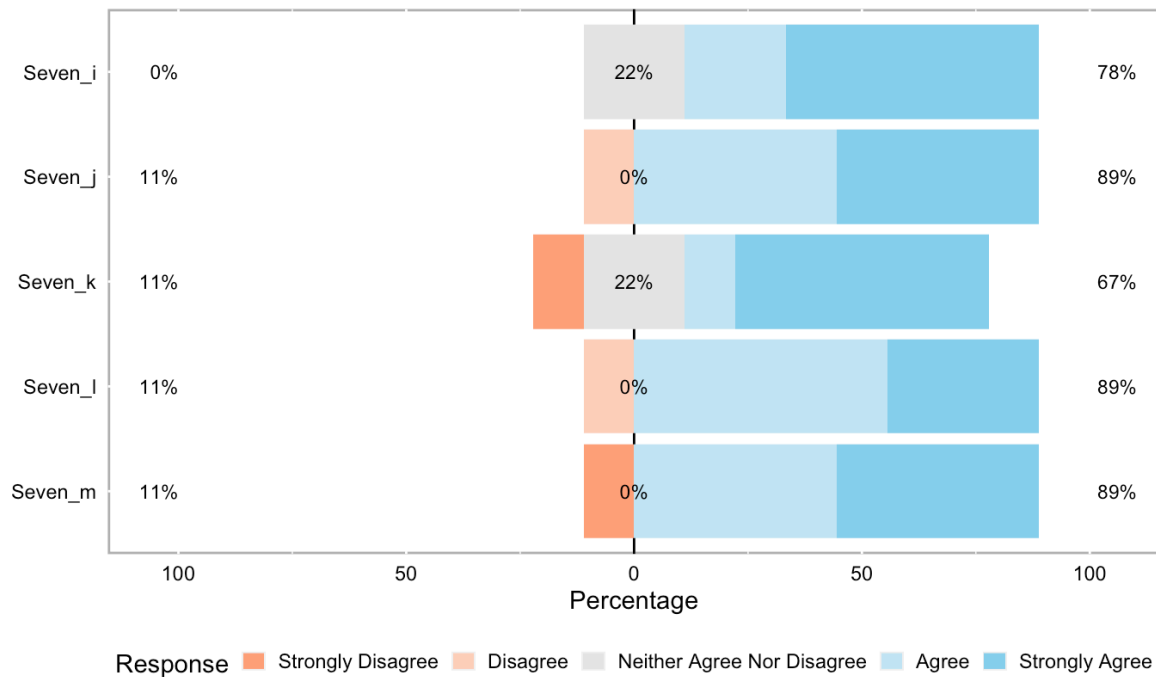
**Team Effectiveness**

Figure 5 and Figure 6 indicate student perceptions of their team effectiveness. 83.2% of the students with intentional group formation were in agreement that they were able to work well with their group, and that work was equally distributed among all members. On the other hand, only 59.8% of the students with random group formation concurred with the statements and around 33.3% of them disagreed with the statements. It is notable that many participants in this group disagreed with the statement – “I know the strengths and weaknesses of my groupmates,” where 57% of them did not find the statement to be relatable. In this section, the second highest statement that the participants disagree with was “I feel that my groupmates

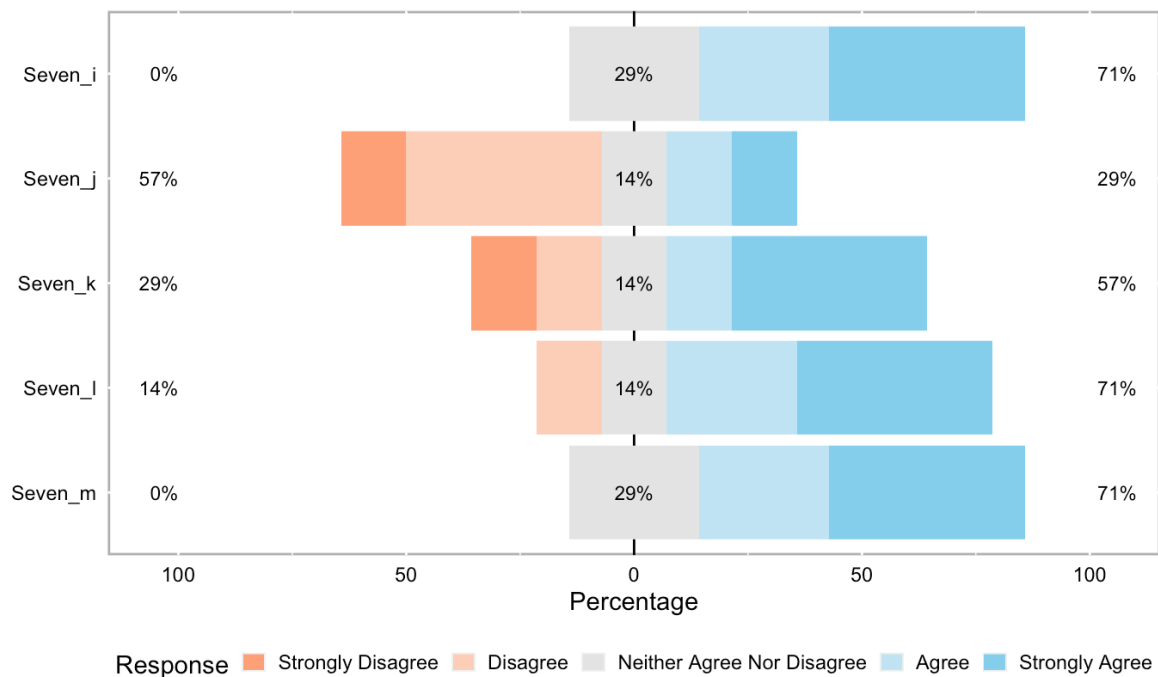
contributed equally thus far,” which implied that some participants felt that they worked more than their groupmates.

**Figure 5**

*Participant Perceptions of Team Effectiveness with Intentional Group Formation*



*Note.* Seven\_i: “I feel that my group contains people with various skill sets.” Seven\_j: “I know the strengths and weaknesses of my groupmates.” Seven\_k: “I feel that my groupmates contributed equally thus far.” Seven\_l: “The working styles between my groupmates and I come together well.” Seven\_m: “When collaborating, my group and I can get the work done efficiently.”

**Figure 6***Participant Perceptions of Team Effectiveness with Random Assignment*

*Note.* Seven\_i: “I feel that my group contains people with various skill sets.” Seven\_j: “I know the strengths and weaknesses of my groupmates.” Seven\_k: “I feel that my groupmates contributed equally thus far.” Seven\_l: “The working styles between my groupmates and I come together well.” Seven\_m: “When collaborating, my group and I can get the work done efficiently.”

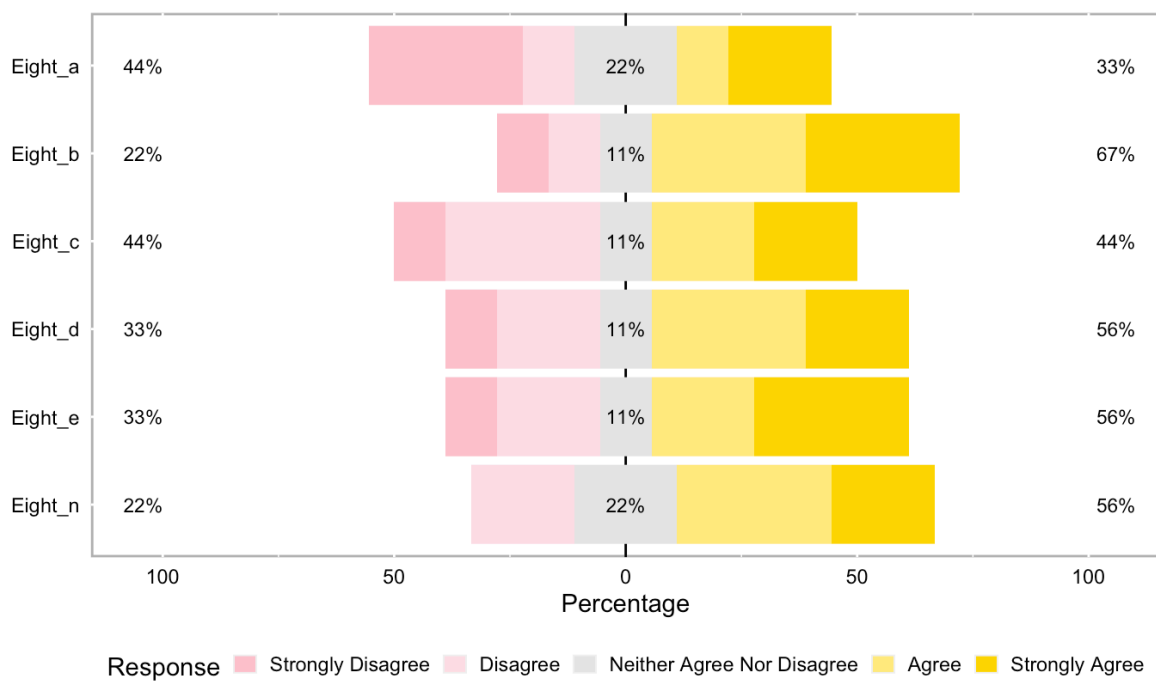
**Course Delivery Methods & Team Well-Being**

Based on Figure 7, some of the participants with intentional group formation agreed while some disagreed with the statements related to team well-being and the course delivery formats. While 44% of the participants disagreed that it would make no difference to them for feeling motivated whether their group was working together physically or remotely, 33% within this group strongly disagreed. When participants with random group formation were asked with the same statements, the percentage increased, where 57% of them disagreed.

Among participants with random group formation, it is notable that the number of participants who agreed with the following two statements was the same as those who disagreed: “Whether my group and I are working together physically or remotely, it would make no difference to me for feeling confident about my group assignment for this class,” and “My group work experience in this class is good thus far. To me, there would be no difference in this whether my group and I are working together physically or remotely,” where both statements received a 43% for both agreement and disagreement.

**Figure 7**

*Perceptions of Team Well-Being and Course Delivery Methods by Participants with Intentional Group Formation*



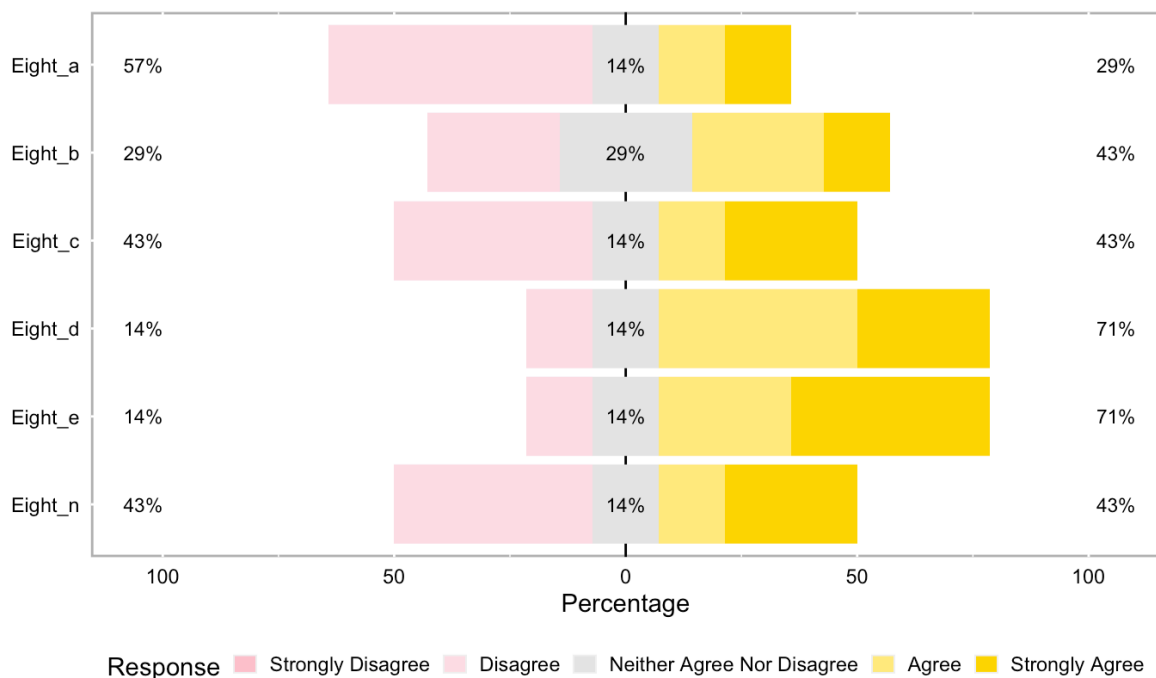
*Note.* Eight\_a: “Whether my group and I are working together physically or remotely, it would make no difference to me for feeling motivated by working with my group on this assignment.” Eight\_b: “Whether my group and I are working together physically or remotely, it would make no difference to me for feeling safe to state my views and opinions in this group.” Eight\_c:



“Whether my group and I are working together physically or remotely, it would make no difference to me for feeling confident about my group assignment for this class.” Eight\_d: “The skill sets that my groupmates and I have makes me feel confident about my group assignment for this class, and it would make no difference to me whether my group and I are working together physically or remotely.” Eight\_e: “I feel that my group and I have the same goal for this class, and we work together for it. To me, there would be no difference in this whether my group and I are working together physically or remotely.” Eight\_n: “My group work experience in this class is good thus far. To me, there would be no difference in this whether my group and I are working together physically or remotely.”

**Figure 8**

*Perceptions of Team Well-Being and Course Delivery Methods by Participants with Random Assignment*



*Note.* Eight\_a: “Whether my group and I are working together physically or remotely, it would make no difference to me for feeling motivated by working with my group on this assignment.”

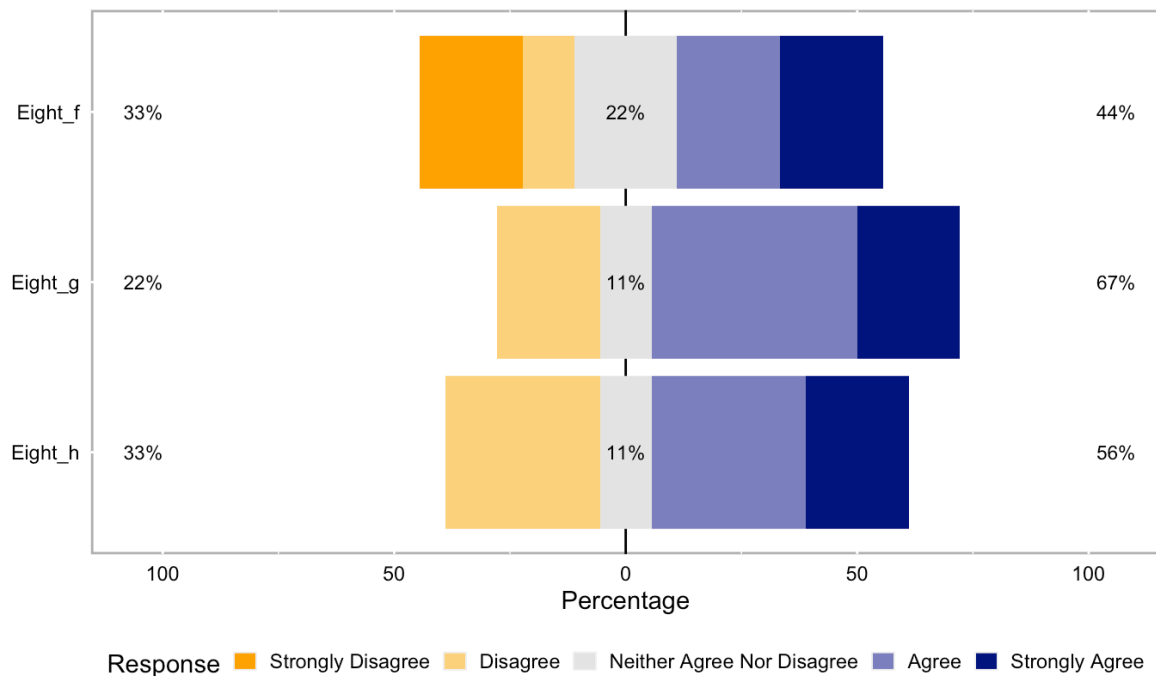
Eight\_b: “Whether my group and I are working together physically or remotely, it would make no difference to me for feeling safe to state my views and opinions in this group.” Eight\_c: “Whether my group and I are working together physically or remotely, it would make no difference to me for feeling confident about my group assignment for this class.” Eight\_d: “The skill sets that my groupmates and I have makes me feel confident about my group assignment for this class, and it would make no difference to me whether my group and I are working together physically or remotely.” Eight\_e: “I feel that my group and I have the same goal for this class, and we work together for it. To me, there would be no difference in this whether my group and I are working together physically or remotely.” Eight\_n: “My group work experience in this class is good thus far. To me, there would be no difference in this whether my group and I are working together physically or remotely.”

### **Course Delivery Methods & Team Communication**

Figure 9 shows perceptions of team communication and course delivery methods by participants with intentional group formation. While there were 22% of them who strongly disagreed with the first statement which mentioned that it would make no difference to them to communicate well with their group whether their group was working together physically or remotely, there were 22% of them who strongly agreed with all the three statements in this section. Figure 10 indicates perceptions of team communication and course delivery methods by participants with arbitrary group formation. It is found that participants from this group may experience difficulty in communicating with their group as there were 71% of them who disagreed with the first statement. However, all participants from this group were in agreement or felt neutral that whether their group was working together physically or remotely, it would make no difference for them to communicate respectfully when differences arose.

**Figure 9**

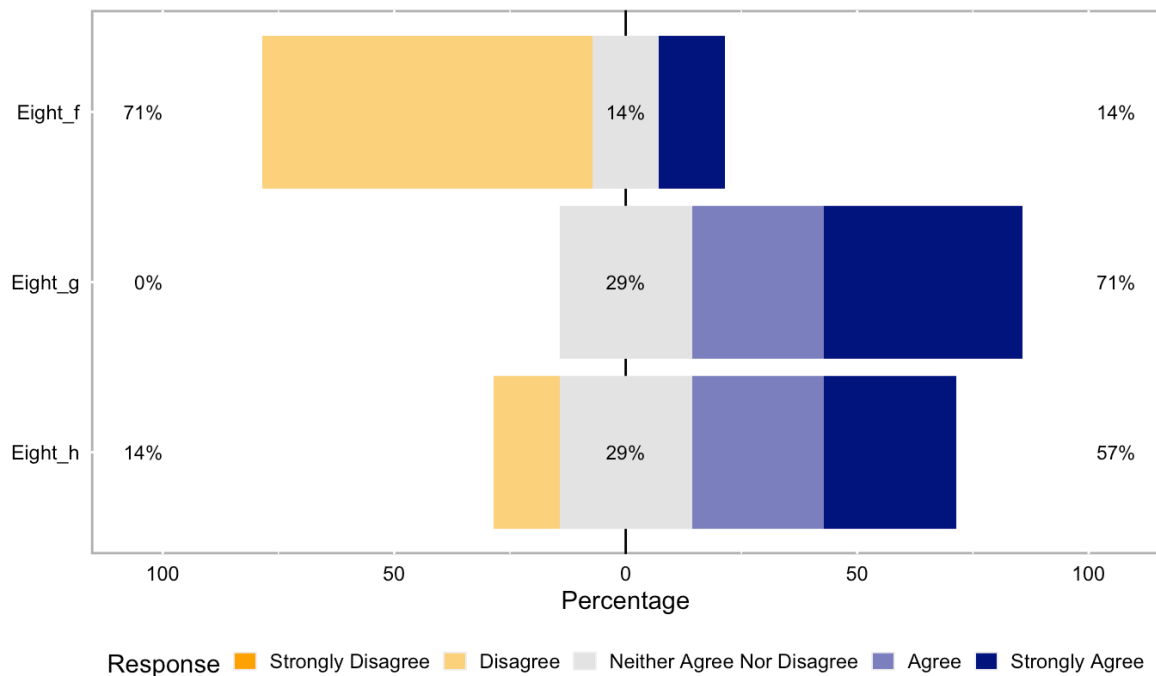
*Perceptions of Team Communication and Course Delivery Methods by Participants with Intentional Group Formation*



*Note.* Eight\_f: “Whether my group and I are working together physically or remotely, it would make no difference to me and my groupmates to communicate well.” Eight\_g: “Whether my group and I are working together physically or remotely, it would make no difference to me and my team to communicate respectfully about differences when they arise.” Eight\_h: “I can get in touch with my groupmates when I need to, and it would make no difference to me whether my group and I are working together physically or remotely.”

**Figure 10**

*Perceptions of Team Communication and Course Delivery Methods by Participants with Random Assignment*



*Note.* Eight\_f: “Whether my group and I are working together physically or remotely, it would make no difference to me and my groupmates to communicate well.” Eight\_g: “Whether my group and I are working together physically or remotely, it would make no difference to me and my team to communicate respectfully about differences when they arise.” Eight\_h: “I can get in touch with my groupmates when I need to, and it would make no difference to me whether my group and I are working together physically or remotely.”

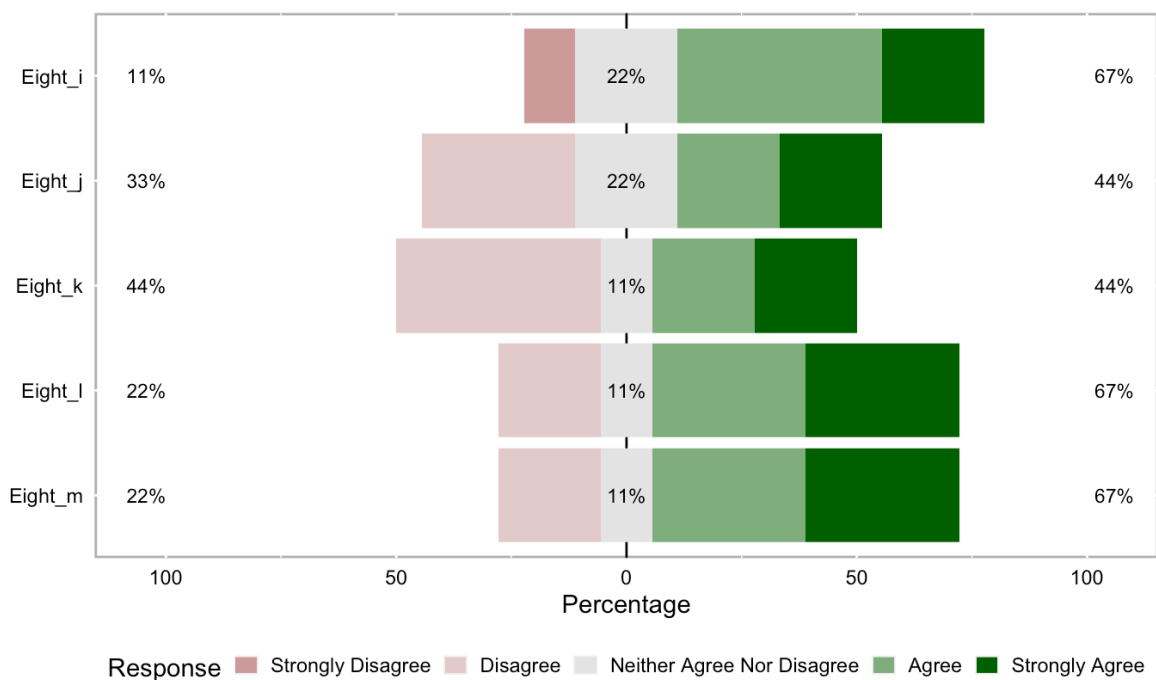
### **Course Delivery Methods & Team Effectiveness**

From Figure 11 and Figure 12, it is found that most participants in this study, regardless of their group formation methods, leaned towards in agreement with the statement “I feel that my group contains people with various skill sets. To me, there would be no difference in this whether my group and I are working together physically or remotely.” Another interesting

insight is that the percentage of participants with intentional group formation who agreed with the statement - “I feel that my groupmates contributed equally thus far, and it would make no difference to me whether my group and I are working together physically or remotely,” is identical to those who disagreed. The pattern of this finding was similar for those who were assigned to group randomly, except the percentage decreased by one percentage on both agreement and disagreement, which was 43%.

**Figure 11**

*Perceptions of Team Effectiveness and Course Delivery Methods by Participants with Intentional Group Formation*

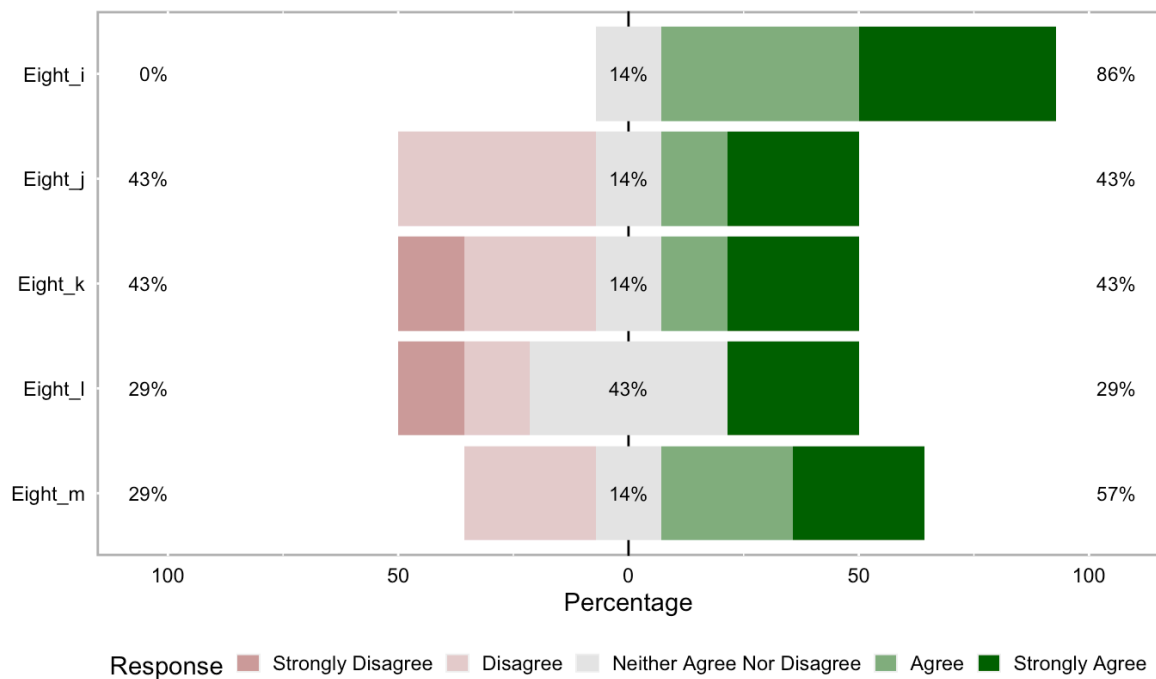


*Note.* Eight\_i: “I feel that my group contains people with various skill sets. To me, there would be no difference in this whether my group and I are working together physically or remotely.” Eight\_j: “Whether my group and I are working together physically or remotely, it would make no difference to me for knowing the strengths and weaknesses of my groupmates.” Eight\_k: “I feel that my groupmates contributed equally thus far, and it would make no difference to me

whether my group and I are working together physically or remotely.” Eight\_l: “The working styles between my groupmates and I come together well, and it would make no difference to me whether my group and I are working together physically or remotely.” Eight\_m: “When collaborating, my group and I can get the work done efficiently. To me, there would be no difference in this whether my group and I are working together physically or remotely.”

## Figure 12

*Perceptions of Team Effectiveness and Course Delivery Methods by Participants with Random Assignment*



*Note.* Eight\_i: “I feel that my group contains people with various skill sets. To me, there would be no difference in this whether my group and I are working together physically or remotely.” Eight\_j: “Whether my group and I are working together physically or remotely, it would make no difference to me for knowing the strengths and weaknesses of my groupmates.” Eight\_k: “I feel that my groupmates contributed equally thus far, and it would make no difference to me whether my group and I are working together physically or remotely.” Eight\_l: “The working

styles between my groupmates and I come together well, and it would make no difference to me whether my group and I are working together physically or remotely.” Eight\_m: “When collaborating, my group and I can get the work done efficiently. To me, there would be no difference in this whether my group and I are working together physically or remotely.”

### **Discussion**

This paper provides insights about students’ experiences while working as a group in an Organizational Behavior class at Cal Poly in the Winter of 2021, concentrating on team well-being, team communication, and team effectiveness. Other than asking closed-ended questions, two open-ended questions were also included in the survey to gain a better understanding of students’ experience.

Without taking methods of course delivery into account, it is shown in Figure 1 and Figure 2 that more students with intentional group formation agreed that their team well-being was healthy, as compared to students with random group formation. However, as shown in Figure 7 and Figure 8, the percentage for both groups in agreement for team well-being significantly dropped when taking methods of course delivery into consideration.

While a majority of the students from both groups were in agreement of good team communication earlier (Figure 3 & Figure 4), the finding became arguable when taking course delivery formats into account, where students with intentional group formation did not only show disagreement, but also strong opinions. A similar pattern is also noticeable for students with random group assignment (Figure 9 & Figure 10).

The most controversial construct in this study is team effectiveness. Although it may not be as apparent in Figure 5, Figure 6, Figure 11, and Figure 12, this can be observed on the open-ended responses from the students, where most students reflected their experiences in regard to team effectiveness. For instance, a student with intentional group formation mentioned, “Some members don't do the same level of work as others,” and another student

with random group assignment resonated, “There is one member who does not contribute nearly as much as the rest of us.”

Other than group work distribution, students also focused on team productivity and described their overall feelings towards their group. A student with random assignment pointed out the following:

This is probably one of the best groups I've worked with; the efficiency with which we complete exemplary work amazes each of us. For example, during the group portion of our last midterm, we were able to quickly and effectively answer each question well, providing meaningful feedback, accepting constructive comments with grace, and seeking to remedy any issues that remained. It's rare to have such a good group, but it is most certainly a welcome surprise.

Another student with random group assignment also commented, “...I absolutely LOVE my group. After we loosened up around each other, it has always been so much fun working with them because we find a balance between productivity and conversing.” However, it cannot be concluded that random group formation has a direct correlation with team effectiveness. As experience may not be identical for every groupmate, the statements above cannot be generalized.

Besides that, students with intentional group formation also reflected their perceptions of the course delivery format, and none of the students with arbitrary group formation responded. A student commented, “Wish we were in person,” while another student stated, “Not being in person definitely takes away one’s engagement, attachment and ability to bond and understand one another (reading social cues and such). Online group work does not even come close to an in-person group work experience.” A student also provided both positive and negative feedback in their comment:



Working remotely does not allow our group to learn much about each other or build strong bonds. The meetings are brief and down to business. I feel this is a result of people being tired of staring at a screen all day which affects the potential of our conversations and problem-solving.

Another student also provided a neutral comment by saying, “Remote or not, my views of my group do not change.”

While there are noticeable patterns in the figures and remarkable open-ended responses from students in this study, it cannot be concluded that methods of group formation affect students’ group work experience. Acquiring responses and reflections from both ends of the spectrum, it also cannot be inferred that course delivery formats are significant factors contributing to students’ group work experience.

### **Limitation of Existing Research**

A limitation that can be found in this study is the small number of participants. Ideally, a t-test within groups was expected to carry out to test the hypothesis where inferential statistics could be obtained. However, with a sample size of 16, a t-test is unfeasible since it has less statistical power and does not yield valid results. The study focused more on the qualitative end by understanding the students’ feedback, as well as performing descriptive analyses through graph visualization.

### **Directions for Future Research**

The aforementioned limitation provides a direction for future research where researchers are encouraged to have more students involved in their study. Since this study solely focused on one course - Organizational Behavior, future research could also conduct the same study with different courses and study the findings between sections within the same course concurrently. This does not only increase the sample size of participants in the study, but also increase the validity of the findings from the research.

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## Appendix

### Senior Project Survey

#### Consent Form

\*Required

This form asks for your agreement to participate in a research project on studying student experience on group work with the application of different group allocation methods. Your participation involves taking a survey, and it is expected that it will take approximately 15 minutes. There are minimal risks anticipated with your participation. Your responses may help inform knowledge of teamwork, and therefore future students and those in the business industry may benefit from your participation. If you are interested in participating, please review the following information:

The purpose of the study is to explore if there is a disparity in student experience on group work. Potential benefits associated with the study include enhancements of student experience and satisfaction of working in a group setting so that group work can be accomplished more efficiently.

If you agree to participate, you will be asked to complete a brief (10-15 minute) online survey, which will ask you questions about your experience on group work. Please note that there are minimal risks if your responses are accidentally disclosed along with your identities.

Please be aware that you are not required to participate in this research, refusal to participate will not affect your standing in the course or involve any penalty or loss of benefits to which you are otherwise entitled, and you may discontinue your participation at any time. You may omit responses to any questions you choose not to answer. Your responses will be collected as anonymously as allowed by the Google Forms platform.

During the period of data collection, data will be stored on Google Forms. Collected data will then be downloaded as an Excel file. The file will be password-protected, encrypted, and stored on the laptop of the primary investigator. Only the primary investigator and academic advisor will have access to it. The survey will also be inactivated once the period of data collection has passed. Collected data will not be used for future studies or shared with other researchers, and will be destroyed once the research is over, which is anticipated to be on 12 March 2021.

This research is being conducted by An Yee Tan from Orfalea College of Business at Cal Poly, San Luis Obispo. If you have questions regarding this study or would like to be informed of the results when the study is completed, please contact An at [atan37@calpoly.edu](mailto:atan37@calpoly.edu) or (805) 215-8573. If you have concerns regarding the manner in which the study is conducted, you may contact Dr. Michael Black, Chair of the Cal Poly Institutional Review Board, at (805) 756-2894, [mblack@calpoly.edu](mailto:mblack@calpoly.edu), or Ms. Trish Brock, Director of Research Compliance, at (805) 756-1450, [pbrock@calpoly.edu](mailto:pbrock@calpoly.edu).

If you are 18 or older and agree to voluntarily participate in this research project as described, please indicate your agreement by completing the survey. Please keep a copy of this form for your reference, and thank you for your participation in this research. \*

Yes, I agree to voluntarily participate in this research project as described.

**Student Information**

Please tell us about yourself.

1. What is your major?
  - Business Administration
  - Economics
  - Industrial Technology and Packaging
  - Psychology
  - Other: \_\_\_\_\_
  
2. What is your current year at Cal Poly?
  - First Year
  - Second Year
  - Third Year
  - Fourth Year
  - Fifth Year +
  
3. Are you a transfer student?
  - Yes
  - No
  
4. To which gender identity do you most identify?
  - Female
  - Male
  - Non-binary
  - Prefer not to say
  - Other: \_\_\_\_\_

**Class & Group Information**

Please tell us about your class and group.

5. Who is your Professor for Organizational Behaviour (BUS387)?
  - Professor Calvin Stevens
  - Professor Patricia Dahm
  
6. How many people are there in your group for your Organizational Behaviour (BUS387) group project?
  - 3
  - 4
  - 5
  - 6
  - Other: \_\_\_\_\_

### Reflection on Group Work Experience

Please tell us about your group work experience in this class (BUS387).

7. Please indicate your level of agreement with the following statements:

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
a. I feel motivated by working with my group on this assignment.					
b. I feel safe to state my views and opinions in this group.					
c. I am confident about my group assignment for this class.					
d. The skill sets that my groupmates and I have makes me feel confident about my group assignment for this class.					
e. I feel that my group and I have the same goal for this class, and we work together for it.					
f. My groupmates and I communicate well.					
g. My team communicates respectfully about differences when they arise.					
h. I can get in touch with my groupmates when I need to.					
i. I feel that my group contains people with various skill sets.					
j. I know the strengths and weaknesses of my groupmates.					
k. I feel that my groupmates contributed equally thus far.					
l. The working styles between my groupmates and I come together well.					
m. When collaborating, my group and I can get the work done efficiently.					
n. My group work experience in this class is good thus far.					

Is there anything else you want to tell me about your experience working with your group thus far? Note: Please do not include names of group members.

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**Reflection on Group Work Experience During the COVID-19 Pandemic.**

Please tell us about your group work experience in this class (BUS387) during the COVID-19 pandemic.

8. Please indicate your level of agreement with the following statements:

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
a. Whether my group and I are working together physically or remotely, it would make no difference to me for feeling motivated by working with my group on this assignment.					
b. Whether my group and I are working together physically or remotely, it would make no difference to me for feeling safe to state my views and opinions in this group.					
c. Whether my group and I are working together physically or remotely, it would make no difference to me for feeling confident about my group assignment for this class.					
d. The skill sets that my groupmates and I have makes me feel confident about my group assignment for this class, and it would make no difference to me whether my group and I are working together physically or remotely.					
e. I feel that my group and I have the same goal for this class, and we work together for it. To me, there would be no difference in this whether my group and I are working together physically or remotely.					
f. Whether my group and I are working together physically or remotely, it would make no difference to me and my groupmates to communicate well.					
g. Whether my group and I are working together physically or remotely, it would make no					

difference to me and my team to communicate respectfully about differences when they arise.					
h. I can get in touch with my groupmates when I need to, and it would make no difference to me whether my group and I are working together physically or remotely.					
i. I feel that my group contains people with various skill sets. To me, there would be no difference in this whether my group and I are working together physically or remotely.					
j. Whether my group and I are working together physically or remotely, it would make no difference to me for knowing the strengths and weaknesses of my groupmates.					
k. I feel that my groupmates contributed equally thus far, and it would make no difference to me whether my group and I are working together physically or remotely.					
l. The working styles between my groupmates and I come together well, and it would make no difference to me whether my group and I are working together physically or remotely.					
m. When collaborating, my group and I can get the work done efficiently. To me, there would be no difference in this whether my group and I are working together physically or remotely.					
n. My group work experience in this class is good thus far. To me, there would be no difference in this whether my group and I are working together physically or remotely.					



Is there anything else you want to tell me about your experience working with your group thus far? Note: Please do not include names of group members.

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