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### **Group Dynamics**

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Even students who are personally opposed to experiential learning activities accept, if somewhat grudgingly, the need for group-level activities involving collaboration with their fellow students in a course dealing with group behavior. Students in such courses need not go far to find real-life examples of the processes and concepts examined in their textbooks. They can read about and discuss such as cohesiveness, leadership, concepts influence, communication, conflict, conformity, and social facilitation, but they can also experience these processes first-hand within the confines of the class itself. The class as a whole exhibits the dynamic properties of larger, more formally organized groups. but it can also be subdivided to create smaller groups that provide further opportunities to explore specific group-level processes.

Engagement-elevating activities used in a course such as group dynamics fall into two broad categories: topic-focused short-term activities and problem-focused, longer-term projects. Topicfocused activities are, in most cases, deliberate applications of a concept or process in a group-based experience and are typically tied to the content of the course in a direct way. For example, when students study group decision-making they may meet in small groups to make a series of decisions. Afterwards, they examine their group's decisions, and gauge for themselves the extent to which their group reacted as theory and research would suggest. Problem-focused projects, in contrast, ask students to work in small groups over an extended period of time (i.e., weeks or months) on a group project. For example, students may be asked to develop a paper or a class presentation on a specific topic or conduct a research project under the guidance of the course instructor.

Both types of activities can help the students gain detailed knowledge of the course topics, experience group processes first hand and perhaps even develop practical skill useful when working with others in groups. Both can falter, however, if the students never grasp the pedagogical purposes of the activities. Students often enjoy the active-learning, experiential phase, but then they fail to make the connection between the experience and the psychological concept (Forsyth, 2003). To help them

make this connection, the instructor may need to add description, analysis, and application phases to complete the learning cycle. Students must not only experience the event but must also describe their experiences, tie their experiences back to course-related concepts and findings, and consider the personal and practical implications of the experiences. In consequence, at minimum, extensive discussion is needed following each activity, but ideally students should complete some type of written analysis that helps them translate their experience into psychological knowledge (Forsyth, 2003).

#### The Task Challenge Activity: An Engaging Example

Group productivity, including performance and decision-making, is a key topic in the field of group dynamics, and one that lends itself well to experiential learning. Students often take issue with research findings when these findings clash too strongly with their intuitive beliefs about groups, and nowhere is this clash more striking than in analyses of group performance (Richard, Bond, & Stokes-Zoota, 2001). Students are reluctant to accept the facts that brainstorming rarely generates solutions that are more creative than those generated by individuals, that cohesive groups only rarely outperform less cohesive ones, and that groups that discuss a problem sometimes err more than groups whose members make judgments individually. Students also tend to agree with the teamwork motto "no one person is as smart as the many," even though the value of a group-approach to a problem depends on the type of task or problem the group faces. Some tasks require high levels of coordinated activity on the part of groups and can only be completed when each group member contributes. Other tasks, in contrast, do not require very much in the way of coordinated action on the part of the group members; even if group members make little or no attempt to adapt their actions to match those of others the group will still succeed (or fail).

I developed the Task Challenge Activity (TCA) to help students recognize how different tasks require the group members combine their inputs in different

ways and that success on a task depends on the fit between their combination strategy and the task's demands. Inspired by Steiner's (1972) taxonomy of group tasks, the TCA asks students to work in groups on a series of problems and puzzles that differ in their demand for coordinated activity. The students can solve some of the problems without even interacting with the other group members. Other problems, in contrast, require discussion among the members and the identification of the single solution that represents the group's answer. Others stress accuracy in one's work, whereas others emphasize quantity over accuracy. As the students move from one challenge to another, they gain a more detailed understanding of the relationship between the coordination demands each task puts on the group and their group's reaction to those demands. The version of the TCA examined here uses three basic types of tasks identified by Steiner—compensatory, disjunctive, and additive but if time allows I add some of the other types of tasks discussed by Steiner (see Forsyth, 2010).

I begin by breaking the class up into small groups with 4 to 6 members. I am careful to make certain that groups do not include close friends or romantically involved pairs, and ask the groups to form in different parts of the room. Unless the layout of the room prevents it, I require the groups meet in the same room (i.e., I deny requests to work outside), and I begin each session by asking members to exchange names and any other relevant background information with one another. Then I distribute a problem sheet that contains the challenges the group must overcome.

#### **Instructions for Students**

Your group is to complete a series of different problems. Please read the directions to each problem carefully before starting, and ask questions if you are uncertain as to how to proceed. Complete Item 1 individually, without any group discussion. All other problems are to be completed by the group.

- 1. Individual Distance Task: Without consulting with any one, write down your estimate of the distance, in miles, between Paris, France, and Mexico City, Mexico.
- 2. Group Distance Task: Compute a group decision for question #1 by averaging together everyone's judgments. List each person's individual decision, and then calculate the average.
- 3. Discuss item #1 as a group, and reach consensus on the best estimate. What is the distance estimate that the group will put forward as its best estimate of the distance?
- 4. Puzzle Task: What is the next letter in the following sequence? OTTFFSS

- 5. Horse-trading Problem: A man bought a horse for \$60 and sold it for \$70. Then he bought it back for \$80 and again sold it for \$90. How much money did he make in the horse-trading business?
- 6. Time Task: Select a person to be the recorder for your group. On a separate sheet of paper have that member record as many uses as your group can think of for old tires. Check the time before you start, and take only 5 minutes.

#### **Solutions and Interpretation**

I collect the answers from the groups in a collective debriefing session, posting each group's scores on a grid on the board for comparison. Intergroup rivalry usually builds during this process, and it provides me with the opportunity to discuss the relationship between cohesion and task performance. In some cases I even offer the group with the highest score some type of bonus, such as exemption from having to complete the paper in which students apply course concepts to their group experience. However, I keep focused on the activity and what it reveals about the various types of problems the groups encountered.

The correct answer to Items 1, 2, and 3, the distance between Paris, France, and Mexico City, Mexico, is 5,721 miles (9208 km). This problem illustrates group performance on compensatory tasks. When students combine their individual estimates, the group average is likely to be close to the correct number, confirming the "wisdom of groups" (Surowiecki, 2004). If time allows, I also compute the estimate by using the entire class's individual estimates and compare that estimate to individual estimates, arithmetic group averages, and the estimate chosen through group discussion. In many cases the mathematical solution to the problem is better than that chosen via discussion. The compensatory method owes its advantages to its relative immunity to loss of efficiency and accuracy caused by poor group communication, status dynamics, and so on.

Items 4 and 5 are disjunctive problems, because the group must settle on a single answer that members must agree should be put forward as the group's answer. Item 4 is a simple riddle, and the answer is E, because the sequence is the first letter of the first 8 digits, One, Two, Three, Four, Five, Six, Seven, and Eight. Item 5, the famed horse-trading problem, is surprisingly difficult for groups to solve—and during the tortured discussion many principles of group performance emerge. For Item 5, the group can solve the problem if it contains just a single person who knows the right answer and can explain the solution. For Item 6, the individual who knows the correct solution (\$20) often needs to be

supported by at least one other person before the solution is accepted, thereby confirming the truth-supported wins rule decision scheme of collaborative decision making (Forsyth, 2010). Item 5 is a simple brainstorming problem, and the group that generates the most uses is considered the winner—although it may be prudent to review the uses to make sure they are all legitimate ones. This task illustrates, in most cases, social loafing, for some groups perform quite poorly on this activity, as the members fail to exert very much effort during the idea-generation process.

I complete the learning cycle, following an analysis of the experience, by asking students to complete a short written assignment that helps them link their experiences in the groups to such concepts as decision schemes, social loafing, and the value of combining multiple viewpoints when making a decision. Such an assignment could include such questions as: Which task was additive? How well did your group perform on this task? Were any of the variables that increased social loafing, such as freeriding, social matching, and blocking operating in your group? Which task was compensatory? On this task was your group's score more accurate than your personal score? Would you recommend using groups to solve compensatory problems? "Which tasks were disjunctive? Describe, very briefly, the processes used by your group to solve the disjunctive tasks."

#### **Ideas for Additional Group Activities**

The Task Challenge Activity has proven itself to be an effective means of teaching students about group processes, for it effectively uses the group experience to communicate information about an important conceptual principle. Like the other activities that are sampled in this section, such experiential activities help students become more engaged in the learning process while at the same time stimulating them to think more deeply about the very phenomena they are examining academically.

#### Social Loafing in Learning Groups

Meyers (1997) reviews a number of critically important issues to consider before undertaking a group activity, particularly when one hopes the activity will increase student engagement. As he notes, student groups, like all groups, are subject to process loss due to social loafing: the reduction in effort seen when individuals work on collective projects. Meyers suggests a number of steps to take to minimize social loafing in student groups, including selecting tasks that are challenging ones for students (and hence require a group approach) and personally engaging. Meyers also notes that research indicates that social loafing become less likely when

individual contributions to the task can be identified, so he recommends that some method be used that rewards students individually rather than only collectively. With these recommendations in mind, Meyers then reviews 68 articles published in the journal *Teaching of Psychology* that describe the use of a small-group learning activity, identifying those that maximized engagement by minimizing factors that may trigger social loafing.

 Meyers, S. A. (1997). Increasing student participation and productivity in small-group activities for psychology classes. *Teaching of Psychology*, 24, 105-115.

#### Key Group Leadership

Mathis and Tanner (1999) describe the Key Groups activity as a means of helping students overcome worries about leading their group. Mathis and Tanner first make certain that students have an understanding of the leadership role, including basic skills and competencies. They then randomly assign students to groups that meet enough times so that all the members have the opportunity to be the group leader at least once. They also use a specific task in the group session: The groups develop the answer key to be used in grading a 7 to 10 item test that the students have already completed as individuals. After the group completes the key task, members then spend time providing feedback to the leader, and the leaders provide group members with feedback as well. Students also develop a short self-evaluation on the basis of their contribution to the group. Mathis and Tanner report that the students felt the exercise helped hone their leadership skills and increase their leadership confidence.

 Mathis, R. D., & Tanner, Z. (1999). An exercise to introduce students to group leadership. *Teaching of Psychology*, 26, 288-290.

#### School Spirit and Group Cohesion

Reifman's (2004) study of school-level cohesion can be replicated by recording students' apparel and their willingness to display the school's name on their automobiles. Reifman, working with colleagues at 20 different universities, used a variety of direct and indirect measures, including coding students' apparel for evidence of university-affiliation, counting school decals in the student parking lots, measuring closeness with the university, and a modified version of the Collective Self-esteem Scale to measure school spirit. Reifman found that these indexes were relatively well-correlated and that the activity helps students better understand the use of indirect measures of social processes. This activity for a course in group dynamics illustrates the degree

of diversity possible in larger collectives, including colleges, communities, or even nations.

 Reifman, A. (2004). Measuring school spirit: A national teaching exercise. *Teaching of Psychology*, 31, 18-21.]

#### **Violating Social Norms**

Schneider (2002) suggests teaching students about the emotional impact of violating common social norms by asking them to violate a common norm in at least 2 different settings. Before the assignment, he reviews the nature of norms and provides students with guidance in how they should react if other people show annoyance during the norm-violation activity. To minimize the possibility of any harm being done to either the student or the bystanders, Schneider assigns each student a norm to violate from a list of various social norms. He does not permit students to pick the norm they wish to violate, and this guideline should not be relaxed as students have been known to choose unwisely if given the freedom to select their own norm violations.

Schneider uses multiple norms to vary students' interest in the project, and his list includes (2002, p. 37) "clip your toenails while sitting with others in a cafeteria," "with hair tousled, ask to borrow a comb from a group of strangers," and "ask people in a movie line if you could move ahead of them." Schneider has students write an extensive analysis of the experience in which they provide analyses of the concept of norms, described their own norm violation experiences, and examine their thoughts, feelings, and behaviors before, during, and after the experience. He also allows students to only imagine they have performed the norm-violation activity but asks those students to explain why they could not carry out such a simple request.

• Schneider, F. W. (2002). Applying social psychological concepts to a norm-violation experience. *Teaching of Psychology*, 29, 36-39.

#### Stimulating Group Formation

Ellis and Kelley (1999) and Lewis and Gurung (2003) use a matching simulation to study how people select partners in dyadic relationships. They give students cards with values that indicate the holder's social worth, but the students can only see others' cards and not their own. After being told to try to be part of a pair with a high value, they then try to form pairs with others in the room. To modify their method to demonstrate group formation, the instructor randomly assigns each student a number from 1 to 30 and has each student (without looking at

the number) place the number on his or her forehead or back. He or she then tells the students to form groups with as many as 5 members, but also let them know that the winning group—the one that will receive some sort of bonus—will be the group whose members' numbers sum to the highest value. If the results match those reported by Ellis and Kelley (1999) and Lewis and Gurung (2003), groups will tend to be high in homophily; the members will be similar in value. Ellis and Kelley (1999) have also used adjectives, affixed to students' foreheads, rather than numbers. They offer a variety of suitable adjectives that vary from positive (e.g., smart, social, spirited) to negative (e.g., cowardly, cruel, bigoted).

- Ellis, B. J., & Kelley, H. H. (1999). The pairing game: A classroom demonstration of the matching phenomenon. *Teaching of Psychology*, 26, 118-121.
- Lewis, B. P., & Gurung, R. A. R. (2003).
   Mixing, matching, and mating: Demonstrating the effect of contrast on relationship satisfaction.
   Teaching of Psychology, 30, 303-304.

#### **Demonstrating Obedience**

Hunter (1981) demonstrates obedience with the help of a colleague who is not known to the students (such as a fellow instructor). Instead of going to class himself, the instructor sends in a colleague, who acts as an authority. This confederate enters the room just as class is about to start, and with an air of confidence tells students to move up and fill empty seats near the front of class. If students do not move, then he or she takes a more commanding tone and say such things as "I cannot continue unless I get cooperation." He or she can also point to particular students who are seated in the back of class and order them to the front. The confederate can then make additional requests, which escalate from the surprising to the ridiculous. The course instructor then enters the room and ask what is going on. When the intruder realizes he or she has entered the wrong class and leaves, the course instructor can ask the students why they obeyed the stranger's commands. This activity requires a careful debriefing.

Snyder (2003) describes a related method for introducing the analysis of obedience. On the day when he discusses obedience in class, he places on his syllabus the statement "Bring an Empty Soda Can to Class!" In class he asks all students who brought a can to place it in their left hand. He then asks all students who feel that they would refuse to obey an authority to raise their right hand. He then asks the students to also raise their left hands, and asks them "Why are you holding an empty soda can?"

- Hunter, W. J. (1981). Obedience to authority. In L. T. Benjamin, Jr., & K. D. Lowman (Eds.), Activities handbook for the teaching of psychology (pp. 149-150). Washington, DC: American Psychological Association.
- Snyder, C. R. (2003). "Me conform? No way": Classroom demonstrations for sensitizing students to their conformity. *Teaching of Psychology*, 30, 59-61.

#### **Demonstrating Social Impact**

Dynamic social impact theory identifies four basic tendencies that emerge during group discussion: consolidation, clustering, correlation, and continuing diversity. Consolidation, for example, is tendency for the majority faction within a group to increase in size over the course of a discussion. Harton and her colleagues describe a classroom activity that they use to demonstrate all four processes (Harton, Green, Jackson, & Latane, 1997). They ask students to answer several multiple choice items working alone, but then to review and possibly revise their answers after talking to the two people sitting on either side of them. They then examine the changes in students' answers and calculate the percentage of students who change their answers. Clustering is also apparent in their responses, for students tend to agree with those seated near them. Students within clusters also tend to give the same answers as one another on other items (i.e., correlation), and some individuals refuse to change their answers even though no one else agreed with them (i.e., continuing diversity).

 Harton, H. C., Green, L. R., Jackson, C., & Latane (1998). Demonstrating dynamic social impact: Consolidation, clustering, correlation, and (sometimes) the correct answer. *Teaching of Psychology*, 25, 31-35.

### **Experiential Learning about Groups: Conclusions**

The use of group-level learning activities in a course on group dynamics is doubly justified. Whereas students may misunderstand the purpose of such activities when they are used in other kinds of courses—thinking they are merely pleasant distractions from the usual class routine of lecture and discussion—in a course that deals with theory and research on groups such activities create and demonstrate within the confines of the classroom the very phenomena being studied in the course. These activities are not just "fun and games" in the classroom, but a proven means of engaging students in their own learning by helping them apply course concepts to their own experiences.

#### References

- Forsyth, D. R. (2003). The professor's guide to teaching: Psychological principles and practices. Washington: American Psychological Association.
- Forsyth, D. R. (2010). *Group dynamics* (5<sup>th</sup> ed.). Belmont, CA: Wadsworth Cengage Learning.
- Richard, F. D., Bond, C. F., Jr., & Stokes-Zoota, J. J. (2001). "That's completely obvious...and important": Lay judgments of social psychological findings. *Personality and Social Psychology Bulletin*, 27, 497-505.
- Steiner, I. D. (1972). *Group process and productivity*. New York: Academic Press.
- Surowiecki, J. (2004). The wisdom of crowds: Why the many are smarter than the few and how collective wisdom shapes business, economies, societies, and nations. New York: Random House.